

DEVON COUNTY COUNCIL.

---

# ANNUAL REPORT

OF THE

# COUNTY MEDICAL OFFICER OF HEALTH

FOR THE YEAR

**1910.**

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EXETER :

WM. POLLARD & CO. LTD., PRINTERS AND LITHOGRAPHERS, NORTH STREET.  
1911.



## INDEX OF SUBJECTS.

Adoptive Acts	...	...	...	...	53
Annual Reports, date received	...	...	...	...	7
Areas, Population, etc.	...	Tables I., VI.	...	...	10
Bacteriology	...	...	...	...	55
Bakehouses	...	...	...	...	51
Barnstaple (Port)	...	...	...	...	64
Births	...	Tables II., III., VI.	...	...	11
By-Laws	...	...	...	...	53
Cancer	...	Tables VI., XIV., XV.	...	...	28
Common Lodging Houses	...	...	...	...	32
Dartmouth and Totnes (Port)	...	...	...	...	65
Deaths	...	Tables IV., V., VI.	...	...	13
Diarrhœa	...	Table VI.	...	...	24
Diphtheria	...	Table XI.	...	...	20
Exeter (Port)	...	...	...	...	65
Factories and Workshops	...	...	...	...	52
Food and Drugs Act	...	...	...	...	44
Hospital Accommodation	...	...	...	...	61
House do.	...	...	...	...	30
Infant Mortality	...	Tables VII., VIII., IX.	...	...	15
Infectious Diseases	...	Tables X., XI.	...	17-61	
Isolation Hospitals	...	...	...	...	61
Kingsbridge and Salcombe (Port)	...	...	...	...	65
Legislation, 1910	...	...	...	...	10
Local Government Board Inquiries	...	...	...	...	11
Lodging Houses	...	...	...	...	32
Measles	...	Table VI.	...	...	24
Medical Officers of Health, List of	...	...	...	...	7
Meteorology	...	...	...	...	68
Midwives Act, 1902	...	...	...	...	54
Milk Supply	...	...	...	...	37
Phthisis (Tuberculosis)	...	Tables VI., XII., XIII.	...	...	26
Physical Features	...	...	...	...	9
Plymouth (Port)	...	...	...	...	66
Population	...	Tables I., VI.	...	...	10
Rivers, Pollution of	...	...	...	...	46
Sale of Food and Drugs Acts	...	...	...	...	44
Sanitary Inspectors, List of	...	...	...	...	8
Sanitary Inspectors' Reports, Summary of	...	Table XVI.	...	...	
Scarlet Fever	...	Table XI.	...	...	19
Scavenging	...	...	...	...	48
Schools (Elementary)	...	...	...	...	58
Sewerage	...	...	...	...	40
Small Pox	...	Table XI.	...	...	19
Slaughter Houses	...	...	...	...	50
Systematic Inspection	...	...	...	...	64
Teignmouth (Port)	...	...	...	...	67
Tuberculosis	...	Tables VI., XII., XIII.	...	...	26
Typhoid Fever	...	Table XI.	...	...	22
Vital Statistics	...	...	...	...	11
Water Supply	...	...	...	...	32
Whooping Cough	...	...	...	...	25
Workshops	...	...	...	...	52



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**SUMMARY** shewing the principal general items of the  
**Vital Statistics, etc., for 1910, contained in this  
 Report.**

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Area of the Administrative County (Census 1901) 1,637,810 acres.

Population, estimated to middle of 1910 .. 451,393 persons.

Number of Sanitary Districts (1910)  $\left\{ \begin{array}{l} 34 \text{ Urban, } 18 \text{ Rural, } \\ \quad \quad \quad 6 \text{ Port} \end{array} \right\} = 58$

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		Year 1910.	Year 1909.
<b>Birth Rate</b>	..	.. <b>19·2</b>	20·0
<b>Death Rate</b>	..	.. <b>12·8</b>	13·4
Principal Infectious Diseases Death Rate		<b>0·34</b>	0·34
Tuberculosis Death Rate	..	.. <b>1·22</b>	1·20
Cancer Death Rate	..	.. <b>1·00</b>	1·03
<b>Infantile Mortality</b>	..	.. <b>75</b>	80



PUBLIC HEALTH DEPARTMENT,

14, BEDFORD CIRCUS,

EXETER.

*July, 1911.*

*To the Chairman and Members of the Devon County Council.*

MY LORDS AND GENTLEMEN,

I have the honor to present my Annual Report for the Administrative County for the year 1910. Since my last Annual Report, the Local Government Board have, in accordance with their powers under Section 68 (2) of the Housing, Town Planning, etc., Act, 1909, issued an Order, dated July 29th, 1910, called the County Medical Officers of Health (Duties) Order, 1910. Under these regulations new duties are laid upon the County Medical Officer, both in regard to his everyday work and the contents of an annual report which he is required to make to the County Council as soon as possible after the 31st day of December in each year. In addition Section 8 of the Order runs thus:—"The Medical Officer of Health of the county shall send to us two copies of his Annual Report and two copies of any Special Report; he shall also send one copy of his Annual Report to the Council of every county district in the county, and shall send *three* copies of any Special Report to the Council of every such county district affected by the Special Report." The directions for the contents of the annual report are very much on the lines of the annual reports that I have already furnished to you, but further information is required in regard to Isolation Hospital Accommodation, Rivers Pollution, and the working of the Sale of Foods and Drugs Acts.

Briefly the other duties under the Order consist of a thorough inspection of all the county districts, in order to



inform himself of the influences affecting or threatening to affect injuriously the public health in the county ; inquiring into and reporting on the hospital accommodation available for the isolation of cases of small pox and other infectious diseases ; communicating to the district medical officer of health any information he may possess as to any danger to health threatening any district, and consult with the district medical officer of health whenever the circumstances may render this desirable ; obtaining from the district medical officer of health any information he may require in regard to vital statistics, sanitary administration, or circumstances ; action taken under the Housing of the Working Classes Acts. He shall, when directed by the Local Government Board, or the County Council, or as occasion may require, make a special report to the County Council on any matter appertaining to his duties. From this it will be seen that the duties of the County Medical Officer have become definite by statute and of an increasing amount. In this report I have endeavoured, as far as possible, to comply with the necessary requirements of the Order, but it must take time before I can make myself fully acquainted with all the sanitary conditions of so large a county. As already stated in my last annual report, I have inspected all the urban districts ; and I am now endeavouring, while doing my work as School Medical Officer, to make myself acquainted with the condition of the rural areas.

Another change brought about by the Local Government Board is the weekly national notification of infectious diseases. You had already in existence a more complete notification throughout the county ; but on reporting this to the Public Health Committee, it was decided to discontinue your own plan, as it seemed wasteful both in time and money to have both running concurrently. Several of the district medical officers of health have expressed regret at this change, as they are now deprived of information in regard to the exact locality of infectious diseases in the rural areas ; only sanitary districts, not villages, are stated in the Local Government Board



returns, but as compensation for this, the Medical Officer of Health is now made aware of the location of notifiable disease in the different sanitary districts throughout England and Wales.

I am glad to be able to report a steady decline in the general county death-rate, infant mortality death-rate, and the number of notifiable diseases. It would be pleasant to report that there was an increase in the birth-rate, or even a stop in the decrease, but unfortunately the decreasing rate is in keeping with the rest of the country for reasons which, as a nation, we must deplore. It is satisfactory to note that the Council has taken the lead in dealing with the scourge of consumption. The Education Committee, as far as rural authorities are concerned, is certainly in the van. Dr. Clay has been the moving spirit in this matter. The visit of the Tuberculosis Exhibition, the lessons given in the elementary schools, and the lectures by the medical inspectors and agricultural lecturers must in time have a most beneficial effect. An association for dealing with consumption on the lines of open-air shelters, introduced by Dr. Lyster, of Great Baddow, Essex, has been formed at Crediton, and associations are also to be formed in Tiverton and Okehampton. The introduction of the Tuberculosis (Hospital) Order, 1911, is another step in the right direction, and it only remains for the Government to introduce universal compulsory notification of this disease with the Pure Milk Bill, and the provision of sanatoria to make the crusade against tuberculosis almost complete. It may be calculated, from the 551 deaths last year, that there were about 5,500 cases of tuberculosis in the Administrative County, causing about one in ten of all the deaths that occurred. Surely these figures are sufficient to suggest the amount of suffering, sadness, waste of life and money that is going on from this, the most easily prevented of all preventible diseases.

The duties laid on the district medical officers by the Local Government Board are becoming more numerous,

and are necessary on account of the method of the spread of infectious diseases being a more open book. It is to be hoped, that with the new machinery provided, the medical officer of health will, with confidence, at once, on being notified, take such measures that will ensure his stamping out and preventing the constant occurrence of epidemics of infectious diseases.

Table XVI (see end), contains a summary of the work carried out by the Inspectors of Nuisances, as gathered from the forms sent to them by the Council.

I have again much pleasure in thanking the members of the different committees, and the officials to whom I have to go for information and assistance, for their great kindness and valuable help rendered to me in the discharge of my duties.

I am,  
My Lords and Gentlemen,  
Your obedient Servant,

GEORGE ADKINS,  
*County Medical Officer.*

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# LIST OF MEDICAL OFFICERS OF HEALTH.

District.		Name.	Date Report received.	Report printed or otherwise.
1911.				
URBAN	Ashburton ..	Dr. S. C. Jellicoe ..	15th March	Printed
	Bampton ..	„ T. W. W. Bovey ..	2nd February	Printed
	Barnstaple ..	„ J. R. Harper ..	7th March	Printed
	Bideford ..	„ M. R. Gooding ..	4th February	Printed
	Brixham ..	„ G. B. Elliott ..	3rd June	Printed
	Buckfastleigh ..	„ H. Ubsdell ..	16th February	Printed
	Budleigh Salterton ..	„ C. Beesley ..	11th March	Printed
	Crediton ..	„ H. M. Body ..	1st March	Manuscript
	Dartmouth ..	„ J. H. Harris ..	13th February	Typewritten
	Dawlish ..	„ H. B. Mapleton ..	9th March	Printed
	Exmouth ..	„ O. Eaton ..	6th June	Printed
	Heavitree ..	„ J. F. Wolfe ..	29th April	Printed
	Holsworthy ..	„ W. G. Gray ..	6th June	Manuscript
	Honiton ..	„ T. W. Shortridge ..	31st March	Typewritten
	Ilfracombe ..	„ E. J. Slade-King ..	4th March	Printed
	Ivybridge ..	„ C. E. Cooper ..	29th March	Printed
	Kingsbridge ..	„ W. H. Webb ..	16th March	Printed
	Lynton ..	„ H. J. Edwards ..	6th March	Typewritten
	Newton Abbot ..	„ H. B. Mapleton ..	9th March	Printed
	Northam ..	„ E. J. Toye ..	4th March	Typewritten
	Okehampton ..	„ E. H. Young ..	25th March	Printed
	Ottery St. Mary ..	„ F. M. Reynolds ..	2nd March	Manuscript
	Paignton ..	„ C. W. Vickers ..	6th March	Printed
	Salcombe ..	„ V. W. Twining ..	24th February	Printed
	Seaton ..	„ H. A. Pattinson ..	9th February	Typewritten
	Sidmouth ..	„ T. H. S. Pullin ..	20th March	Printed
	South Molton ..	„ W. H. Wigham ..	26th January	Manuscript
	Stonehouse, East ..	„ T. Leah ..	8th February	Printed
	Tavistock ..	„ C. C. Brodrick ..	7th March	Manuscript
	Teignmouth ..	„ F. C. H. Piggott ..	8th April	Printed
	Tiverton ..	„ R. B. Cullen ..	18th April	Typewritten
	Torrington, Great ..	„ E. Morse ..	26th January	Manuscript
	Torquay ..	„ T. Dunlop ..	9th March	Printed
	Totnes ..	„ K. R. Smith ..	4th March	Printed
RURAL	Axminster ..	„ W. Langran ..	13th February	Printed
	Barnstaple ..	„ J. R. Harper ..	4th March	Printed
	Bideford ..	„ W. Bethune ..	14th March	Printed
	Broadwoodwidge ..	„ C. G. Gibson ..	25th April	Printed
	Crediton ..	„ L. H. Moiser ..	20th February	Printed
	Culmstock ..	„ W. H. Date ..	27th March	Printed
	Holsworthy ..	„ W. G. Gray ..	7th June	Manuscript
	Honiton ..	„ F. M. Reynolds ..	7th February	Manuscript
	Kingsbridge* ..	„ W. H. Webb ..	24th March	Printed
	Newton Abbot ..	„ H. B. Mapleton ..	9th March	Printed
	Okehampton ..	„ E. H. Young ..	17th March	Printed
	Plympton St. Mary ..	„ S. Noy Scott ..	15th March	Printed
	South Molton ..	„ H. M. Body ..	24th March	Printed
	St. Thomas ..	„ L. P. Black ..	11th April	Printed
	Tavistock ..	„ C. C. Brodrick ..	2nd March	Printed
	Tiverton ..	„ J. R. R. Pollock ..	6th March	Printed
	Torrington ..	„ E. J. Slade-King ..	8th February	Printed
	Totnes ..	„ S. C. Jellicoe ..	17th March	Printed

\* Report unnecessarily delayed owing to the fault of the contracting printer.



## LIST OF MEDICAL OFFICERS OF HEALTH—continued.

District.	Name.	Date Report received.	Report printed or otherwise.	
PORT		1911.		
	Barnstaple ..	Dr. M. R. Gooding ..	4th February	Manuscript
	Dartmouth & Totnes ..	„ J. H. Harris ..	13th February	Typewritten
	Exeter ..	„ O. Eaton ..	3rd July	Typewritten
	Kingsbridge and Salcombe ..	„ A. Pearce ..	14th January	Manuscript
	Plymouth ..	„ F. M. Williams ..	4th March	Printed
	Teignmouth ..	„ F. C. H. Piggott ..	8th April	Printed

**LIST OF SANITARY INSPECTORS.**

District.	Name.	Date of receipt of Report.
<b>URBAN</b>	Ashburton ..	A. Wilson .. 1911. 14th February
	Bampton ..	R. Ellis .. 4th March
	Barnstaple ..	J. Hill .. 24th February
	Bideford ..	J. Lugg .. 8th February
	Brixham ..	J. H. Lowe .. 28th February
	Buckfastleigh ..	A. Warren .. 9th February
	Budleigh Salterton ..	J. B. Holden .. 3rd March
	Crediton ..	T. Jones .. 17th February
	Dartmouth ..	T. W. Joyce .. See Table XVI.
	Dawlish ..	F. S. C. Churchward .. 18th February
	Exmouth ..	J. Wilson .. 28th February
	Heavitree ..	F. E. Simpson .. 28th February
	Holsworthy ..	F. Vanstone .. 18th February
	Honiton ..	A. Tillotson .. 27th February
	Ilfracombe ..	H. J. Karslake .. 20th January
	Ivybridge ..	W. H. Full .. 13th February
	Kingsbridge ..	H. Monson .. 31st January
	Lynton ..	W. Yeo .. 28th February
	Newton Abbot ..	H. Judd .. 21st January
	Northam ..	A. Richards .. 8th February
	Okehampton ..	F. J. Worden .. 26th June
	Ottery St. Mary ..	R. M. Smith .. 20th February
	Paignton ..	J. Crathorn .. 21st February
	Salcombe ..	F. Swimburne .. See Table XVI.
	Seaton ..	E. W. Skinner .. 27th February
	Sidmouth ..	E. St. L. Whitford .. 1st February
	South Molton ..	E. D. Groves .. 27th February
	Stonehouse, East ..	N. G. T. Fedrick .. 16th January
	Tavistock ..	F. Camble .. 2nd February
	Teignmouth ..	J. Drake .. 18th January
	Tiverton ..	J. Siddalls .. 11th May
	Torrington, Great ..	G. Leate .. 1st February
	Torquay ..	C. MacMahon .. 21st April
	Totnes ..	W. F. Follet .. 8th February

## LIST OF SANITARY INSPECTORS—continued.

District.		Name.	Date of receipt of Report.
			1911.
<b>RURAL</b>	Axminster ..	W. H. Biggs ..	1st February
	Barnstaple ..	E. G. Kingwell ..	20th June
	Bideford ..	J. Pennington ..	25th February
	Broadwoodwidge ..	J. Frayne ..	15th February
	Crediton ..	L. E. Sharland, ..	9th February,
		S. Pridham ..	8th February
	Culmstock ..	W. R. Beadon ..	20th April
	Holsworthy ..	R. Banbury ..	18th January
	Honiton ..	A. J. Redfurn ..	16th January
	Kingsbridge ..	J. H. Bailey ..	22nd February
	Newton Abbot ..	R. A. Rogers ..	1st February
	Okehampton ..	H. J. Ward ..	28th February
	Plympton St. Mary ..	W. E. Horton ..	28th March
	South Molton ..	R. Kelland, ..	25th February
		W. S. Gardner ..	27th February
	St. Thomas ..	E. H. Quick ..	22nd February
	Tavistock ..	W. J. Mason, ..	28th February
		T. H. Harris ..	28th February
	Tiverton ..	R. Ellis ..	27th February
	Torrington ..	R. Gomer ..	16th February
	Totnes ..	W. F. Follet ..	16th February

**PHYSICAL FEATURES.**

Devon, the third largest county in England, is bordered on the north by the Bristol Channel, on the south by the English Channel, on the west by Cornwall, and the east by Somerset and Dorset. It lies between latitudes  $50^{\circ} 15'$  and  $51^{\circ} 15'$ , and contains 1,637,810 acres. Its geological structure is that of a vast synclinal trough, of which the marine Devonian formation of Exmoor in the north, and that from Dartmouth to Modbury in the south form the edges ; while Silurian rocks, cropping out in the south from under the Devonian, compose the promontory from Start Point to Bolt Tail. In this great trough lie the carboniferous rocks (without the uppermost coal measure) ; and through this stratified rock is forced the great granitic mass of Dartmoor. It is from here that most of the many streams, yielding an abundance of potable waters have their origin.

## POPULATION.

The Administrative County consists of 451,393 inhabitants, of whom 228,363 are in the 32 urban districts, and 223,030 in the 18 rural districts. The whole population may, however, be considered "rural," for the urban districts (excluding those of Torquay, Barnstaple, Tiverton, Newton Abbot and Exmouth) are small and have the advantages pertaining to rural areas.

The main occupation of the population is that of agriculture, but along the coast, a large proportion of the inhabitants is engaged in catering for visitors, and in the fishing industry. There are a few trades carried on, the chief being the manufacture of paper, boots and shoes, woollen material, cabinet-making, lace, gloves, and pottery. There are also corn mills and tanning yards. None of the above trades can be classified as dangerous.

On Table I, will be found the acreage, population, number of inhabited houses, and number of persons per house for each urban and rural district.

## SANITARY LEGISLATION.

A number of Bills relative to sanitation, or containing provisions relative to public health, were brought forward during the year, but none were placed on the Statute Book.

These were :—

Elementary Schools.—Instruction in Hygiene.

Public Health (Health Visitors).

Water Supplies Protection.

Nurses' Regulations.

Public Health (Provisional Orders).

Milk and Dairies.

Coroners' Law and Death Certifications.

As the Housing and Town Planning Bill only came into force at the end of the previous year, there was plenty of procedure to occupy the attention of sanitary authorities



**TABLE I.**  
**(LOCAL GOVERNMENT BOARD TABLE I.)**  
**(Census 1901.)**

Districts.	Acreage.	Total Population	No. of Inhabited Houses.	Average No. of persons per house.
<b>URBAN.</b>				
Ashburton .. ..	6925	2660	569	4.7
Bampton .. ..	7785	1657	371	4.4
Barnstaple .. ..	2359	14137	3144	4.4
Bideford .. ..	3196	8732	1843	4.7
Brixham .. ..	5595	8090	..	5.0
Buckfastleigh ..	1472	2520	584	4.3
Budleigh Salterton ..	840	1885	540	4.0
Crediton .. ..	2552	3980	..	..
Dartmouth .. ..	1847	6579	1125	5.8
Dawlish .. ..	1500	4003	892	4.5
Exmouth .. ..	4000	11472	2218	4.7
Heavitree .. ..	3500	7527	1533	4.9
Holsworthy .. ..	749	1371	285	4.8
Honiton .. ..	3134	3230	713	4.5
Ilfracombe .. ..	5836	8550	1819	4.7
Ivybridge .. ..	500	1575	..	..
Kingsbridge .. ..	808	3011	605	5.0
Lynton .. ..	7203	1641	408	4.0
Newton Abbot .. ..	4132	12518	2704	4.6
Northam .. ..	3042	5355	1154	4.6
Okehampton .. ..	502	2568	524	4.9
Ottery St. Mary ..	10008	3495	853	4.2
Paignton .. ..	5177	8385	1785	4.7
Salcombe .. ..	1184	1710	419	4.0
Seaton .. ..	1091	1325	309	4.2
Sidmouth .. ..	1600	4200	1030	4.0
South Molton .. ..	6450	2848	698	4.0
Stonehouse, East ..	190	15111	1462	10.3
Tavistock .. ..	1551	4728	867	5.4
Teignmouth .. ..	1635	8502	1905	4.4
Tiverton .. ..	17650	10382	2317	4.0
Torrington, Great ..	3456	3241	..	..
Torquay .. ..	3858	33625	6614	5.0
Totnes .. ..	1408	4034	..	..
Total .. ..	122735	214647	39290	4.7
<b>RURAL.</b>				
Axminster .. ..	52125	12203	2797	4.4
Barnstaple .. ..	132059	17692	4077	4.3
Bideford .. ..	53775	6400	1415	4.5
Broadwoodwidge ..	24116	2460	531	4.6
Crediton .. ..	93508	11500	..	..
Culmstock .. ..	20972	3336	752	4.4
Holsworthy .. ..	84690	7316	1583	4.6
Honiton .. ..	73054	9318	2147	4.3
Kingsbridge .. ..	70082	11366	2273	5.0
Newton Abbot .. ..	99142	18902	4229	4.5
Okehampton .. ..	114566	13211	..	..
Plympton St. Mary ..	73426	19793	4016	4.9
South Molton .. ..	134052	10480	..	..
St. Thomas .. ..	109640	24520	5650	4.3
Tavistock .. ..	141071	16304	3332	4.9
Tiverton .. ..	82000	15339	3486	4.3
Torrington .. ..	79796	9260	2057	4.8
Totnes .. ..	77001	12848	..	..
Total .. ..	1515075	222248	38345	4.5
Administrative County	1637810	436895	77635	4.6



during the year, in regard to carrying out the provisions of this Act, which, if made full use of, will be of the greatest use in overcoming many of the difficulties in connection with certain dangers to the public health, arising out of insanitary or insufficient house accommodation.

## LOCAL GOVERNMENT BOARD INQUIRIES.

The following list gives the year's record of sanitary schemes put before the Local Government Board by the various sanitary authorities, that is to say so far as the Board have notified the County Authority :—

Date.	Sanitary District.	Subject.	Amount.	Result.
2-2-10	Culmstock ..	Sewage Disposal ..	£ 350	Sanctioned
8-2-10	Totnes (R.), S. Brent	„ ..	430	„
10-2-10	Exmouth ..	„ ..	710	„
15-3-10	Ilfracombe ..	„ ..	1,612	„
	„ ..	Street Improvement	1,913	„
	„ ..	Public Walks and Pleasure Grounds	610	„
24-3-10	Dawlish ..	Sewerage ..	545	„
1-6-10	Tiverton (U.) ..	„ ..	2,000	„
2-6-10	East Stonehouse	„ ..	2,000	„
21-9-10	Plympton St. Mary, Plymstock	„ ..	2,600	„
16-11-10	Budleigh Salterton	„ ..	10,000	„
22-11-10	Ilfracombe ..	„ ..	300	„
23-11-10	Axminster ..	„ ..	..	„

## VITAL STATISTICS.

### BIRTHS.

During the year there were 8,709 births registered in the county (4,300 in the urban, and 4,409 in the rural areas), against 9,007 and 9,140 for the two preceding years.

The birth-rate was 19.2 per 1,000, against 20.0, 20.3, and 20.1 per 1,000 for the three preceding years.

TABLE II.

**BIRTH-RATES.**

Districts.	Rates per 1,000 of population.									
	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Urban .. .. .	21.3	21.1	20.6	21.3	20.4	20.3	19.5	20.0	19.3	18.8
Rural .. .. .	22.1	22.8	22.2	22.0	22.0	21.7	20.7	20.7	20.6	19.7
Administrative County ..	22.2	21.9	21.4	21.7	21.2	21.0	20.1	20.3	20.0	19.2
England and Wales ..	28.5	28.6	28.4	27.9	27.2	27.0	26.3	26.5	25.7	25.1

On looking at Table II, it will be seen that the birth-rates in both the combined urban and rural districts are again, as last year, the lowest recorded for the past decennium, and in keeping with the steady decline going on throughout the country. This is 25.1 against 25.7 per 1,000 for 1909. It will be noticed that there is a marked difference between the rate for the Administrative County, and that of rural England and Wales, viz., 19.2 against 25.1 per 1,000.

The medical officers of health again draw attention to the seriousness of this declining birth-rate, and many mention the moral factors which are the principal causes, viz., late marriage, no desire for children, and the inability of many women, through their up-bringing, to become mothers.

One of the probable causes of the smaller birth-rate in the county, compared to the rest of the country, is that a large portion of the inhabitants are found in health resorts along the coast, and it well shows that the residents in these places consist mostly of elderly people, and women past the child-bearing period.

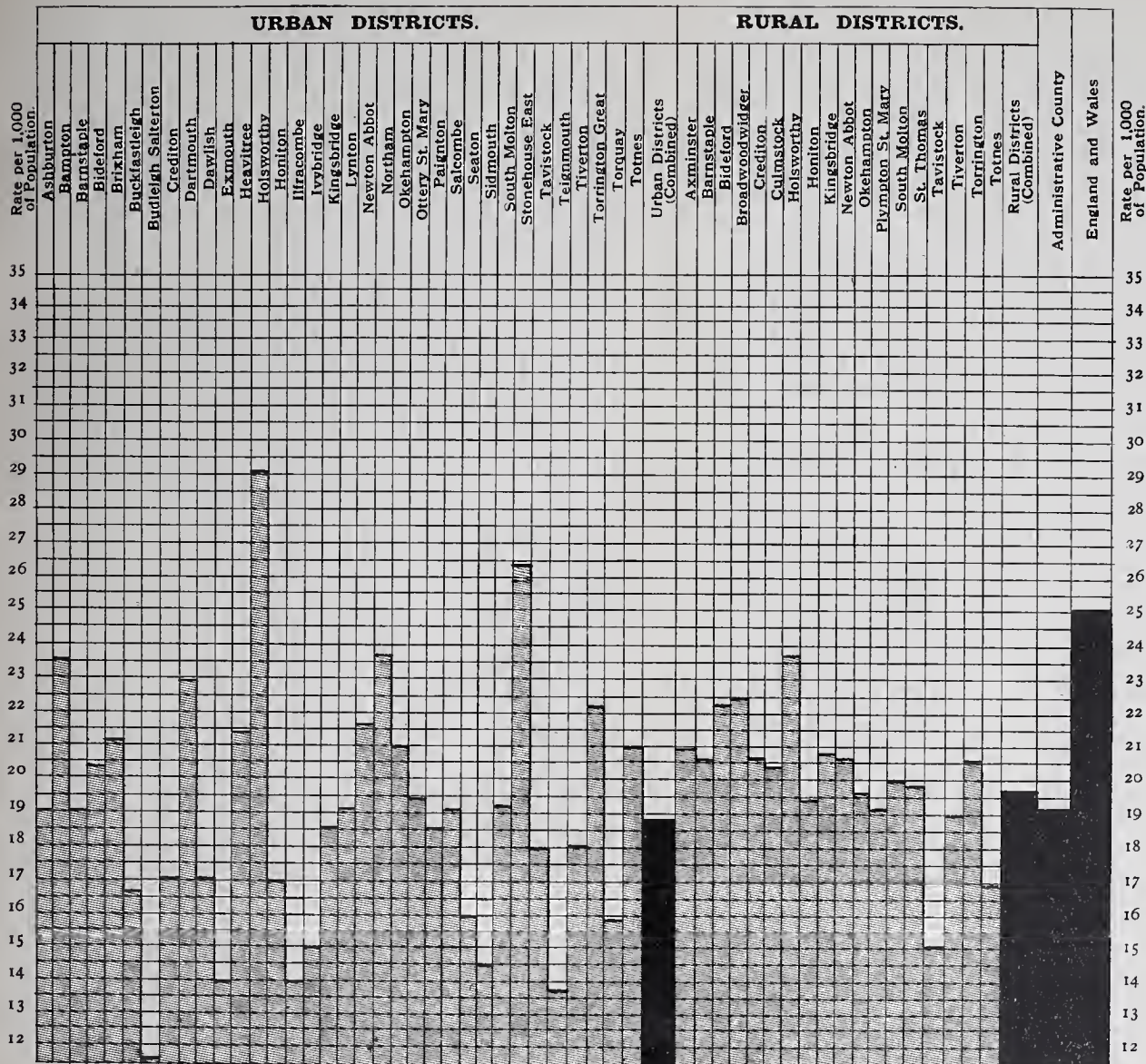
TABLE III.

On referring to Table III, the columns present, as in previous reports, very irregular markings, especially in the urban districts. These districts contain, as a rule, smaller



**TABLE III.**  
**1910.**

**BIRTH-RATES.**







populations, and the addition of an extra birth or two, at once shows a marked difference in the birth-rate. Curiously, the highest rate in the urban districts is Holsworthy, the same as last year. Budleigh Salterton has the lowest rate and is a little below that for last year; here the influences of the nature of the population, as already mentioned, are strongly in evidence.

## ILLEGITIMATE BIRTHS.

Of the 8,709 births registered, 323 (177 in the urban and 146 in the rural areas) were illegitimate, giving a rate of 4.1 per cent. for the urban and 3.3 per cent. for the rural districts, with a general rate of 3.7 per cent. for the Administrative County.

## DEATHS.

The total number of deaths registered during the year is 5,810 (3,117 in the urban and 2,693 in the rural districts), against 6,047 and 6,116 for the two previous years. The net death-rate is 12.8 per 1,000 against 13.4, 13.6 and 14.3 per 1,000 for the three preceding years.

TABLE IV.

### DEATH-RATES.

Districts.	Rates per 1,000 of population.									
	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Urban .. ..	15.3	16.5	14.4	15.0	15.6	14.3	14.8	14.2	13.6	13.6
Rural .. ..	13.5	13.7	12.8	14.1	13.7	13.0	13.8	12.7	13.2	12.0
Administrative County ..	14.3	15.0	13.6	14.5	14.7	13.6	14.3	13.6	13.4	12.8
England and Wales ..	16.9	16.2	15.4	16.2	15.2	15.4	15.0	13.8	13.7	12.8

On referring to Table IV, it will be seen that the death-rate is the lowest recorded for the last ten years, and probably the lowest on record. There is a great reduction in the rate for this year compared with that for the previous year, and for the year antecedent to it. The reduction for the Administrative County is brought about by the great lowering of the rural rate, viz. 1 per 1,000. The urban rate is the same as that for last year. The general rate is the same as that for rural England and Wales, viz., 12.8 per 1,000.

### TABLE V.

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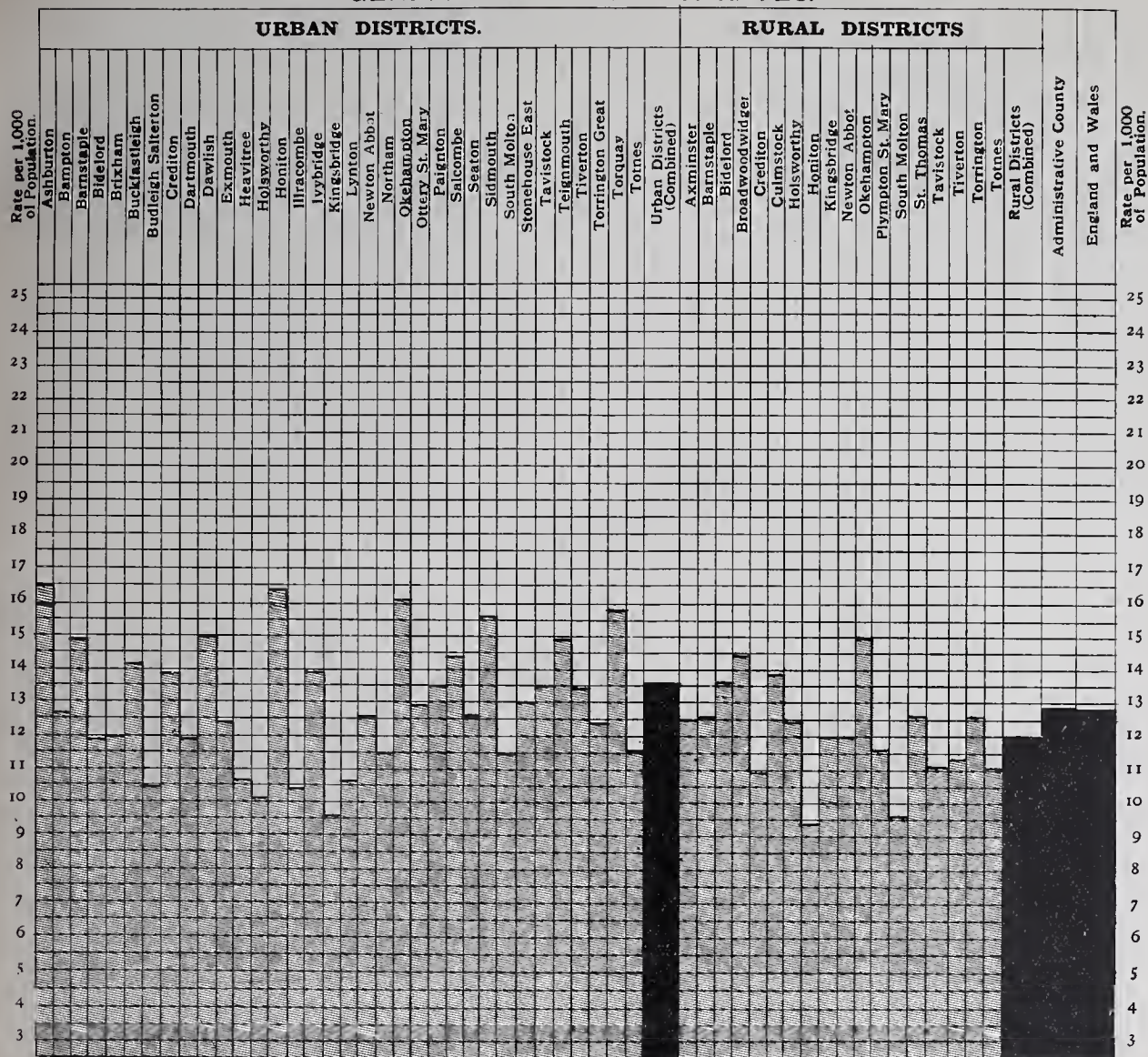
The columns in Table V present a less irregular outline than that for the births. For the urban districts, Ashburton has the highest rate, 16.5 per 1,000, and Kingsbridge the lowest, 9.6 per 1,000. In commenting on the death-rate for Brixham, Dr. Elliott remarks that “were it not for the deaths “of 22 men belonging to Brixham, who were lost in a gale, “in the Bristol Channel, the death-rate would be 9.5 instead of “12.0 per 1,000.” Dr. Harris also states that “owing “to 11 deaths among strangers, who either died or were “brought into Dartmouth dead, the rate has been raised “from 11.8 to 13.2 per 1,000.”

Dr. Slade-King, again, remarks on the frequency of old age enjoyed by the inhabitants of Ilfracombe. Whilst, in England and Wales from 1881 to 1890, people reaching 75 years or over, accounted for 10.5 per cent. of the gross death rate, in Ilfracombe the rate was 29.3 per cent.

For the rural districts, the lowest rate, 9.4, occurred in Honiton. This district had, with one exception, the lowest rate in the previous year. Okehampton, as in the previous year, has the highest death-rate (15.0 per 1,000). Dr. Mapleton reports for Newton Abbot that the general and zymotic death-rates are the lowest on record, probably due to the absence of measles and whooping cough.

**1910.**

## GENERAL NETT DEATH-RATES.







On Table VI (see end of report), will be found details as to age and cause of death in all cases registered in the Administrative County.

## INFANT MORTALITY.

By this is meant the number of deaths that occur among infants under 12 months of age, reckoned as so many per 1,000 of the births registered. It is generally held as an index of the sanitary administration of a district, but there are other factors at work which greatly influence the mortality rate, such as the occupation of the mothers, the care taken of children suffering from measles and whooping cough, and the incidence of these two diseases in a district, for such are most fatal in infant life.

TABLE VII.

### DEATH OF CHILDREN UNDER 1 YEAR.

Districts.	Rates per 1,000 Registered Births.									
	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Urban .. .. .	119	133	102	116	108	109	103	101	83	83
Rural .. .. .	89	90	83	101	82	84	90	75	76	67
Administrative County ..	104	111	92	108	95	96	96	88	80	75
England and Wales ..	151	133	132	146	128	133	118	110	98	95

From the above table it will be seen that the infant mortality rate has considerably decreased in the rural part of the Administrative County (67 per 1,000 against 76 for the previous year). The rate in the urban district is the same as that for the previous year. The general rate is 75 per

1,000, against 95 per 1,000 for rural England and Wales. Both these rates are the lowest on record. It is a satisfactory sign, as far as the population is concerned, but it cannot be made a set-off against the diminished birth-rate.

### TABLE VIII.

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The columns in Table VIII present great irregularities, especially in the urban districts. The same remarks hold good as in the previous urban tables.

*Urban districts.*—In commenting on the infant mortality at Barnstaple, Dr. Harper states, “The lessons to be learnt from a high mortality are mainly two-fold:—(1) that the natural food of a child is its mother’s milk, and that any other substitute is a poor one, at the best; (2) that the sanitary condition and cleanliness of the home also bears a share in determining the death-rate.” Dr. Gooding states for the high mortality at Bideford that “many of the infants have died from inanition and premature birth. I am of opinion much of this is caused by mothers having to work at factories, especially during the latter months of pregnancy.” Dr. Elliott states that in Brixham the rate (48.6 per 1,000) is the lowest for 15 years, and he attributes this to the action of the district nurses, who are in touch with the majority of parturient women, and practically act on the powers of the Notification of Births Act, although this is not in force. Dr. Eaton, for Exmouth, reports that the infant mortality has been reduced one half during the last ten years, the principal cause being the work of the two district nurses. Dr. Slade-King mentions the measures taken at Ilfracombe to reduce the death-rate, viz., special attention given to the storage of food in domestic larders, supervision of the milk supply, cleanliness of surfaces in streets, courts, and around houses, the rapid removal of stable manure, and the great attention given to the condition of the house drains. Dr. Leah, in reporting on the high rate for East Stonehouse, states, that considering the poverty of the inhabitants generally, and the



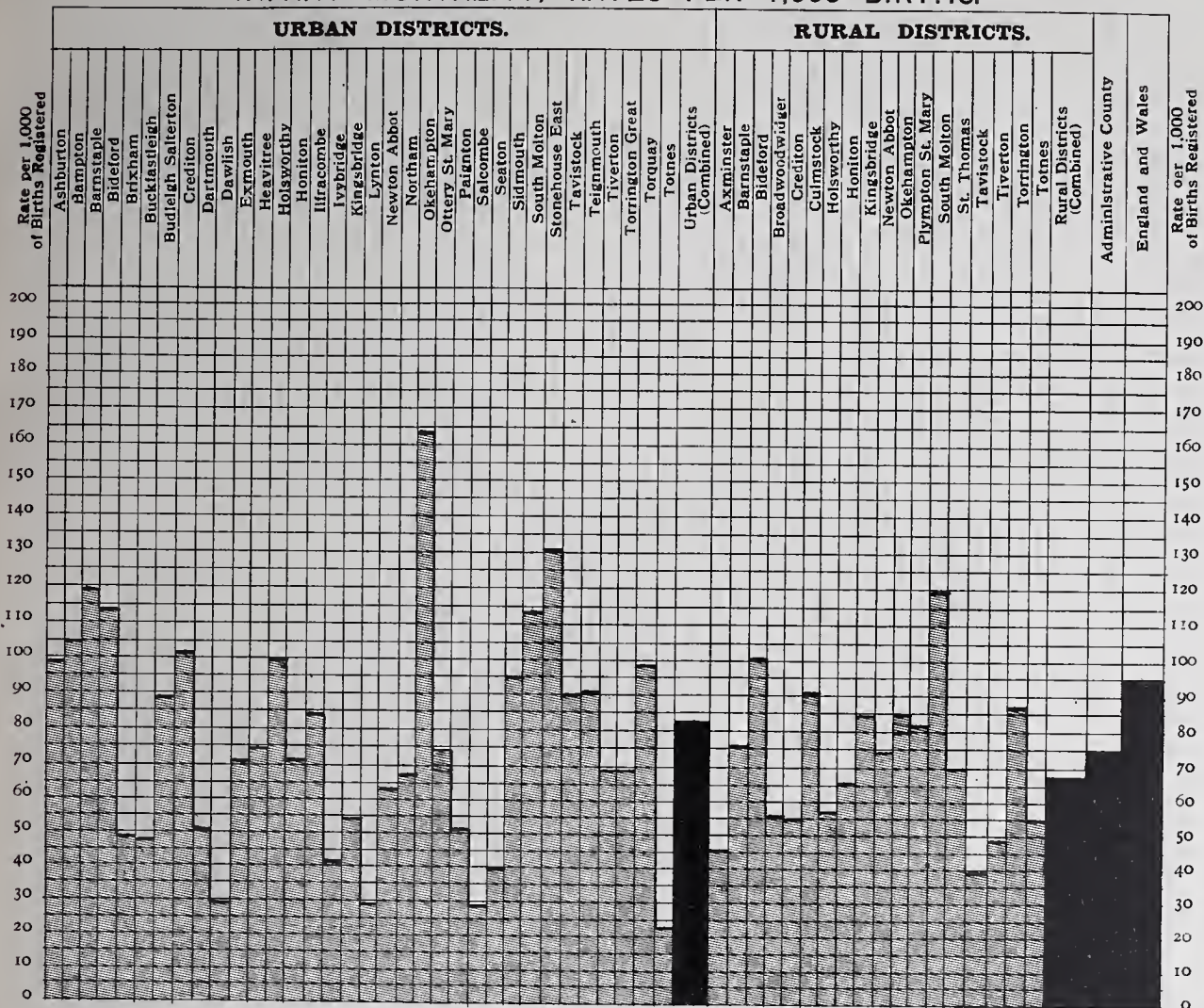
TABLE VIII.

1910.

## INFANT MORTALITY, RATES PER 1,000 BIRTHS.

## URBAN DISTRICTS.

## RURAL DISTRICTS.





necessity, in many cases, for the mothers to go out to work, he does not consider the rate excessive. “It must be remembered that Stonehouse is not as other districts. The population, consisting largely of men in the naval and military services, is nomadic. Men enter the service young, marry, and settle their wives here, to remain during the child-bearing periods of their lives. The men retire at 40 or thereabouts, at the latest, and leave for some other place. These, again, are succeeded by another generation of service people under like conditions. This makes the place more of a nursery than most places are with a large population of young children.”

*Rural districts.*—For Bideford, Dr. Bethune states that it is the highest for 10 years, and means that of every 9 children born one dies before it reaches the age of one year. Dr. Young, for Okehampton, hopes, that with the advent of trained nurses into the districts, a still further diminished infant mortality will be in evidence. For Teignmouth, which is the only district that has adopted the Notification of Births Act, Dr. Piggott reports that of the 124 births registered in that district, 23 of the mothers were visited by the health visitor, and no friction had arisen in carrying out the provisions of the Act.

Table IX (see end of report) gives the particulars of the ages and causes of death in relation to infant mortality.

## **ILLEGITIMATE DEATHS.**

The infant illegitimate death-rate was 17.6 per cent. against 7.1 per cent. for those infants born in wedlock.

## **DISEASES AMENABLE TO SANITARY REGULATIONS.**

Under this heading are included the seven infectious diseases, which come under the Notification Act (Infectious Diseases), 1889. These are small pox, scarlet fever, diphtheria, membranous croup, enteric fever, puerperal fever, and erysipelas. To this list are added measles, whooping cough, and tuberculosis, all of which can be modified or prevented by sanitary regulations.



TABLE X.

**DEATHS FROM THE PRINCIPAL INFECTIOUS DISEASES,  
EXCLUDING TUBERCULOSIS.**

Districts.	Rates per 1,000 of population.									
	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Urban .. ..	0.79	0.68	0.53	0.76	0.81	0.51	0.52	0.51	0.37	0.34
Rural .. ..	0.69	0.37	0.46	0.61	0.51	0.57	0.57	0.45	0.31	0.34
Administrative County ..	0.74	0.53	0.50	0.69	0.66	0.56	0.54	0.48	0.34	0.34

In this table are set forth the rates of these diseases as they have occurred in the county during the past 10 years. The rates for this year are identical with those for last year in the Administrative County; slightly less in the urban, and slightly more in the rural districts.

TABLE XI.

On Table XI are set forth the numbers of notifiable diseases which occurred in the different districts. There were 593 cases with 42 deaths notified in the urban, 474 cases with 31 deaths in the rural, and 3 cases with no fatality in the port districts, giving a total of 1,070 against 1,470 for the preceding year for the Administrative County, with a rate of 2.3 per 1,000 against 3.3 per 1,000 for the previous year.

During the month of May a case of anthrax in a slaughter-house man at Barnstaple was notified to Dr. Harper. The man scratched his forearm against a stay projecting from the carcass of a lamb. The case was admitted into the infirmary, but proved fatal. There was no evidence to show how he contracted the disease. Precautions were at once taken and the slaughter house closed, thoroughly disinfected and lime-washed. All woodwork, ropes, etc., were, as far as possible, destroyed.

TABLE XI.

1910.

## NOTIFIABLE DISEASES.

(LOCAL GOVERNMENT BOARD TABLES III. AND IV.)

DISTRICTS.	Population estimated by Medical Officer of Health.	Small Pox.			Scarlet Fever.			Diphtheria and Membranous Croup.			Fever.			Puerperal Fever.		Erysipelas.		Total.	
		Cases.	Deaths.	Hospital Cases.	Cases.	Deaths.	Hospital Cases.	Cases.	Deaths.	Hospital Cases.	Cases.	Deaths.	Hospital Cases.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
URBAN.																			
Ashburton .. ..	2660	..	..	..	4	..	..	1	..	..	..	..	..	..	..	3	..	8	..
Bampton .. ..	1650	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	..	1
Barnstaple .. ..	14506	..	..	..	3	..	..	13	..	..	6	..	..	..	..	8	..	30	..
Bideford .. ..	9550	..	..	..	1	..	..	4	2	..	1	..	..	1	..	3	..	10	2
Brixham .. ..	8700	..	..	..	..	..	..	35	3	..	2	2	..	..	..	4	..	41	5
Buckfastleigh ..	2450	..	..	..	1	..	..	17	1	..	..	..	..	..	..	1	..	19	1
Budleigh Salterton	2210	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..
Crediton .. ..	3940	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	..	3	..
Dartmouth .. ..	7159	..	..	..	1	..	..	1	1	..	5	1	..	..	..	3	..	10	2
Dawlish .. ..	4000	..	..	..	1	..	1	2	..	..	1	..	..	..	..	1	..	5	..
Exmouth .. ..	11950	..	..	..	7	..	..	2	..	..	3	..	..	1	1	10	..	21	1
Heavitree .. ..	11300	..	..	..	9	..	8	2	..	..	2	..	1	..	..	5	..	18	..
Holsworthy .. ..	1371	..	..	..	..	..	..	6	..	..	..	..	..	..	..	3	..	9	..
Honiton .. ..	3230	..	..	..	1	..	..	2	2	..	..	..	..	..	..	2	..	3	2
Ilfracombe .. ..	9400	..	..	..	2	..	1	3	1	..	..	..	..	..	..	2	..	7	1
Ivybridge .. ..	1575	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	2	..
Kingsbridge .. ..	3011	..	..	..	2	..	..	4	..	..	..	..	..	..	..	3	..	9	..
Lynton .. ..	1765	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..
Newton Abbot ..	13850	..	..	..	17	..	..	40	4	..	2	..	..	..	..	11	..	70	4
Northam .. ..	5648	..	..	..	2	..	..	..	..	..	2	..	..	..	..	1	..	5	..
Okehampton .. ..	2900	..	..	..	29	..	..	4	..	..	1	..	..	..	..	3	..	37	..
Ottery St. Mary ..	3495	..	..	..	1	..	..	6	2	..	..	..	..	..	..	..	..	7	2
Paignton .. ..	10500	..	..	..	19	1	..	5	..	..	3	2	..	..	..	3	..	30	3
Salcombe .. ..	1820	..	..	..	6	..	..	..	..	..	..	..	..	..	..	..	..	6	..
Seaton .. ..	1500	..	..	..	3	..	1	1	..	..	..	..	..	..	..	1	..	5	..
Sidmouth .. ..	5100	..	..	..	6	..	..	2	2	2	..	..	..	..	..	2	..	10	2
South Molton ..	2700	..	..	..	1	..	..	6	..	..	1	1	..	..	..	3	..	11	1
Stonehouse, East ..	15000	..	..	..	16	..	7	3	1	2	1	..	1	1	1	7	..	28	2
Tavistock .. ..	4866	..	..	..	2	..	..	2	1	..	1	..	..	..	..	..	..	5	1
Teignmouth .. ..	8750	..	..	..	16	..	15	2	..	..	2	1	..	..	..	3	..	23	1
Tiverton .. ..	10382	..	..	..	2	..	..	13	1	..	3	..	..	..	..	1	..	19	1
Torrington, Great ..	3241	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..
Torquay .. ..	34150	..	..	..	58	1	49	58	9	50	1	..	..	..	..	6	..	123	10
Totnes .. ..	4034	..	..	..	8	..	..	3	..	..	1	..	..	..	..	1	..	13	..
Totals .. ..	228363	..	..	..	219	2	82	237	30	54	40	8	2	3	2	94	..	593	42
RURAL.																			
Axminster .. ..	12203	..	..	..	8	2	..	4	..	..	2	..	..	..	..	10	..	24	2
Barnstaple .. ..	16486	..	..	..	2	..	..	4	1	..	..	..	..	..	..	2	..	8	1
Bideford .. ..	6182	..	..	..	3	..	..	1	..	..	..	..	..	..	..	3	..	7	..
Broadwoodwidge ..	2352	..	..	..	1	..	..	4	..	..	1	..	..	..	..	..	..	6	..
Crediton .. ..	11320	..	..	..	7	..	..	..	..	..	..	..	..	1	..	1	..	9	..
Culmstock .. ..	3250	..	..	..	..	..	..	6	2	..	..	..	..	..	..	3	..	9	2
Holsworthy .. ..	7316	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	..	3	..
Honiton .. ..	9318	..	..	..	13	..	..	9	1	..	..	..	..	..	..	4	..	26	1
Kingsbridge .. ..	11366	..	..	..	20	..	..	2	1	..	..	..	..	..	..	9	1	31	2
Newton Abbot ..	18902	..	..	..	27	2	14	26	1	8	7	1	4	1	1	9	1	70	6
Okehampton .. ..	13000	..	..	..	10	..	..	..	..	..	1	..	..	..	..	6	..	17	..
Plympton St. Mary ..	22810	..	..	..	16	..	1	54	3	7	8	1	2	1	1	6	..	85	5
South Molton ..	10440	..	..	..	1	..	..	1	..	..	1	..	..	..	..	1	..	4	..
St. Thomas .. ..	23800	..	..	..	27	1	21	33	4	15	7	..	2	..	..	11	..	78	5
Tavistock .. ..	10837	..	..	..	10	..	..	5	4	..	3	..	..	..	..	2	..	20	4
Tiverton .. ..	15200	..	..	..	12	..	6	14	..	12	..	..	..	..	..	7	..	33	..
Torrington .. ..	9400	..	..	..	2	..	..	1	..	..	1	..	..	..	..	3	..	7	..
Totnes .. ..	12848	..	..	..	24	1	1	9	2	..	2	..	..	1	1	2	..	37	3
Totals .. ..	223030	..	..	..	183	6	43	174	19	32	33	2	8	4	3	81	2	474	31
PORT.																			
Barnstaple .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dartmouth & Totnes	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	1	..
Exeter .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kingsbridge & Salcombe	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plymouth .. ..	..	..	..	..	..	..	..	1	..	1	1	..	1	..	..	..	..	2	..
Teignmouth .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals .. ..	..	..	..	..	..	..	..	1	..	1	2	..	2	..	..	..	..	3	..
Administrative County	451393	..	..	..	402	8	125	412	49	87	75	10	12	7	5	175	2	1070	73





Dr. Eaton reports that the infectious diseases rate for Exmouth is the lowest on record, and Dr. Wolfe states that the Heavitree rate is the lowest for 13 years.

### **SMALLPOX.**

No cases of this disease were notified during the year against 2 for the preceding year (both of which occurred in the Port of Plymouth). The medical officers of health still lament the decline of vaccination and utter a serious note of warning against the amount of inflammable material for the onslaught of small pox when it does break out. Dr. Vickers, for Paignton, states that for this year only 25 per cent. of the children are vaccinated against 33 per cent. for the preceding year.

### **SCARLET FEVER.**

This disease has been present in 43 of the districts against 44 for last year. There were 402 cases notified (219 in the urban, and 183 in the rural), with 8 deaths (2 in the urban and 6 in the rural). Last year, 708 cases, with 4 deaths, and in the previous year 711 cases, with 11 deaths, were notified. By this it will be seen that there were over 300 less cases notified for the year.

*Urban districts.*—An outbreak occurred at Okehampton in the last quarter of the year, when 29 cases were reported. The epidemic was connected with school attendance, was of a mild type, and ended with no fatal results. The largest outbreak prevailed at Torquay, where 58 cases were notified, 49 of these were removed to the isolation hospital. One death was registered from the disease, and this occurred five months after the patient's discharge from the hospital, where he had suffered from rheumatic fever and endocarditis. Dr. Dunlop reports that cases occurred in every month of the year in every ward; and that in most cases the disease was of a very mild nature. Several of the children affected were discovered attending school in an infectious condition. The Medical Officer of Health for Heavitree reports 9 cases, 7 of which were attending the same school, and contracted the disease

from an unrecognised case by the parents. Dr. Mapleton reports a slight increase over the previous year in the Newton Abbot district. The three cases notified in Seaton were all imported. Dr. Piggott reports the disease as unusually prevalent in Teignmouth, of marked severity and complicated with ear troubles, but there were no deaths.

*Rural districts.*—Twenty-seven cases in each of the Newton Abbot and St. Thomas districts were notified. For the former the majority of cases were at Moretonhampstead ; for the latter, Dr. Black reports an outbreak at Holcombe Burnell, due to a child, whilst in the peeling stage, attending school. A prosecution with a fine of 24s. was undertaken in this case. Of the 24 cases reported in the Totnes district, 17 occurred at Galmpton. These were all traceable to school contacts. Mild epidemics were reported in the Honiton and Kingsbridge districts. It is to be noticed that the mild type of scarlet fever still prevails, and that of the 402 cases reported in the county, 125 were treated in isolation hospitals, chiefly at Heavitree (8 out of 9 cases), Teignmouth (15 out of 16 cases), Torquay, St. Thomas (21 out of 27 cases), Tiverton (rural) (6 out of 12 cases), and Newton Abbot (rural) (14 out of 27).

## DIPHTHERIA.

During the year this disease has prevailed in 43 of the districts against 38 for the previous year. There were 412 cases notified (237 in the urban, 174 in the rural, and one in the port districts), with 49 deaths (30 in the urban and 19 in the rural). Last year 474 cases, with 42 deaths, and in the previous year 510 cases, with 51 deaths, were registered. The mortality rate, for cases notified for the three years, was in 1908, 10 per cent. ; 1909, 8.8 per cent. ; 1910, 10 per cent. The last figures will be of interest for comparison in future years, as to the incidence on the death-rate by the powers granted under the Diphtheria Antitoxin Order, 1910.

From the reports it appears that only 87 of the 412 cases received hospital treatment.

*Urban districts.*—Dr. Elliot reports an outbreak of 35 mild cases at Brixham, caused by badly trapped drains. Antitoxin and bacteriology were both used in this epidemic, and there were only 3 deaths. Dr. Ubsdell reports an outbreak at Buckfastleigh from February to June. Suspicion rested on cats as being the “carriers” in the 17 cases that occurred. Only one death was recorded here. Two cases (1 imported) were reported in Heavitree, both of which recovered. In this connection Dr. Wolfe states that the Antitoxin Order has been anticipated by his Council for many years. Three of the 6 cases at Holsworthy were imported. For Newton Abbot, Dr. Mapleton reports that diphtheria, after the comparative immunity of the previous year, was again responsible for a number of notifications (40). These were spread fairly evenly over the whole year, and were mostly due to multiple attacks in one building, viz. 5 in each case. The most serious incident was an outbreak in the Union House nursery, where 5 cases occurred with one death. No direct cause could be ascertained, but it was probably due to one of the attendants being a “carrier.” Dr. Young reports for Okehampton, that, after an interval of 11 years, 4 cases were notified, all traceable to one case. They were verified by bacteriology. Antitoxin was used, and there was no fatal result. For the Ottery St. Mary district, 6 cases, with two fatal results, were notified from Tipton St. John, in children attending the elementary school. The school was closed by the medical officer of health, and before the re-opening all likely carriers and contacts were examined bacteriologically by the school medical officer. All the cases proved negative. The school was re-opened, and no fresh cases occurred. This was a good example of the use of bacteriology in dealing with outbreaks of diphtheria among school children. The cause of the outbreak was not ascertained, but the sanitary condition of the hamlet, both in regard to water supply and drainage, is in a very unsatisfactory condition. For Teignmouth, Dr. Piggott welcomes the decline, there being only 2 cases, with no deaths, for the year, against 6 cases for the preceding year.

For Torquay, Dr. Dunlop states that in the year 1908



diphtheria seemed to have gained a footing in the borough, 99 cases being notified; in 1909, 61 cases were notified, and up to November, 1910, 34 cases. Then came a great deal of rain in November and December, when the number of cases notified went up to 58. He, therefore, thinks that the meteorological conditions have some influence on the increase. He also thinks that the political elections, with the numerous meetings, the cheering and singing of partisans, was not without blame in spreading infection.

*Rural districts.*—Reports for the rural districts mention outbreaks at Barnstaple—4 cases (3 directly traceable to the first case) with one death; at Broadwoodwidger, 4 cases, with good results from the use of antitoxin; six cases at Hemyock, in the Culmstock district, with 2 deaths (suspicion rested on the insanitary condition of the schools). Nine of the 13 cases in the Honiton district were due to insanitary surroundings. Dr. Webb reports a large decrease in the number of cases in the Kingsbridge district—2 cases with one death, against 8 cases in the previous year. Dr. Mapleton also reported a decrease in the Newton district, 26 cases against 75 for the previous year. These were chiefly confined to two distinct groups, one at Chudleigh and the other at Bickington. Dr. Noy Scott reports for Plympton St. Mary 54 cases against 28 for last year. He attributes a good deal of this to enforced school attendance. Dr. Black, for St. Thomas, reports 33 cases against 28 for the previous year. Seventeen cases occurred in the Western Counties' Asylum, and were due to defective drainage, and 10 cases occurred at Broadclyst, due to "carriers." Of the 9 cases reported in the Totnes district, 4 were imported, and 2 were due to insanitary surroundings of the houses.

## **TYPHOID FEVER.**

There were 75 cases notified (40 in the urban, 33 in the rural, and 2 in the port districts), with 10 deaths, against 93 cases and 10 deaths reported in 1909, and 112 cases, with 18 deaths, in the previous year. The disease has been distributed over 32 districts, against 31 for the preceding year.



*Urban districts.*—There were 6 cases notified in Barnstaple, but no deaths. Dr. Harper was unable to trace the origin of any of these cases, and there was no history of polluted water or milk, or the consumption of shell fish. Dr. Beesley reports that there has not been a case of typhoid in Budleigh Salterton since 1904. The 5 cases at Dartmouth, Dr. Harris states, were due to shell fish, and in order to prevent the danger from this cause printed notices have been issued, warning people against the consumption of uncooked shell fish, and that taken from sources liable to pollution. Other cases of typhoid produced by this cause are reported from Dawlish, Newton Abbot, and Paignton. Dr. Young reports, that after eleven years' absence, typhoid fever again appeared in Okehampton, the first case being that of a young man from the navy. The disease was confirmed by bacteriology, and another case occurred two months later. Dr. Leah reports one case only in Stonehouse, and remarks on the singular freedom from the disease that this district enjoys. Dr. Piggott reports 2 cases (1 imported) for Teignmouth, and states that since the new water supply has been installed, the incidence of the disease has fallen to a level never previously attained.

*Rural districts.*—For Broadwoodwidge, Dr. Gibson reports a case of special interest in that it bears out the method of infection, which undoubtedly applies to many cases of obscure typhoid. It was carried by a female servant, who gave an indefinite history of enteric some years ago. She went to a farm in 1909, where a case of typhoid occurred soon after her arrival. She went to another farm in 1910, and again another case occurred soon after her arrival here. Bacteriological investigations have been made of her discharges, but, so far, have proved negative. She is being watched and has been cautioned as to the possibility of being a "carrier," and advised to take every precaution. Dr. Scott reports, for the Plympton district, that of the 8 cases notified, 4 were at St. Budeaux, 2 at Plympton, one at Ermington, and one at Yealmpton. Three of the cases were imported, and 2 were due to polluted drinking water. Of the 7 cases reported in the Newton Abbot district, 3 were traceable to defective drainage

near Kingsteignton. For St. Thomas, Dr. Black reports that of the 7 cases notified, 2 were in the County Asylum, due to defective drainage, 2 were at Topsham, and single cases at Pinhoe, Lympstone, and Alphington. There was no definite cause for any of these. The Medical Officer of Health for Derby communicated with the County Medical Officer, as to a case of typhoid occurring in that town, traceable to the patient receiving contaminated mussels from Lympstone in the St. Thomas district.

## **DIARRHOEA.**

There were 39 deaths registered during the year (27 in the urban, and 12 in the rural districts) against 58, 76, and 79 for the three preceding years.

No comments of any importance regarding this disease are made in the reports. The mortality incidence is declining year by year, and is in keeping with a better understanding by the people at large, of the advantages of cleanliness and wholesomeness of food for children, and the danger attached to accumulation of stable and horse refuse in the vicinity of dwellings, especially as affording breeding grounds for house flies, which are now acknowledged to be frequent "carriers" of diseases.

## **MEASLES.**

During the year there have been 20 deaths registered in the county (8 in the urban and 12 in the rural districts), against 28, 50, and 98 for the three preceding years.

*Urban districts.*—Epidemics are reported as having occurred at Brixham, where Dr. Elliott protested against the General Post Office authorities for allowing postmen to continue at their duties, when having the disease in their homes. Dr. Mapleton reports for Dawlish, that the disease prevailed there for the last seven months of the year. It was remarkable in that it was not explosive, as is usual with this disease, but occurred in small groups over long periods. Dr. Shortridge

reports an extensive epidemic at Honiton, extending from July to September. Dr. Twining mentions a very mild but extensive epidemic at Salcombe in April with one death, and Dr. Piggott states that about 400 cases occurred in Teignmouth from May to June, but as it was a favourable time of the year only one death occurred.

*Rural districts.*—For Axminster, Dr. Langran reports a wide epidemic of a severe type. There was a severe epidemic at Hem-yock, in the Culmstock district, with cases in every house and 2 fatal results. Dr. Mapleton reports that the greater part of Newton Abbot was free, but the German variety existed at Abbotskerswell, Kingsteignton, and Ogwell. For Plympton St. Mary, Dr. Noy Scott reports that in May and June a considerable number of children were attacked in the two Plymptons, but only one death occurred. In the severe weather of December, an extreme epidemic appeared in Hooe and Turn-chapel. The disease was of exceptional virulence, and was marked by grave larungeal and pulmonary complications. Eight deaths occurred ; and in connection with these, it was noticed that all were children under 5 years of age, and that poverty and thriftlessness were the marked characteristics of the families, whilst fresh air and cleanliness were in abeyance.

## **WHOOPIING COUGH.**

This disease caused 57 deaths during the year (26 in the urban and 31 in the rural districts), against 53, 70, and 61 for the three preceding years.

*Urban districts.*—The largest number of deaths (8) occurred at Barnstaple, where it was widely prevalent for the first four months of the year. All the deaths were in children under 5 years of age. The disease was prevalent in Holsworthy during the spring, but no deaths were registered from it. It was also very prevalent at South Molton from April to June, causing 2 deaths, and the closing of the elementary schools.

*Rural districts.*—As in the urban district of Barnstaple, the disease was very prevalent throughout the rural area, causing 6 deaths. The same conditions apply to Holsworthy, as



prevailed in the urban district. Dr. Webb reports the disease as being much less prevalent in the Kingsbridge area. Dr. Mapleton reports a few cases at Ilsington and Abbotskerswell, and an outbreak in the Union workhouse with one fatal result. Outbreaks are reported in the Plympton St. Mary district, with 9 deaths, the disease being chiefly in Plympton St. Maurice, Plympton St. Mary, and Plymstock. The disease caused a considerable amount of prolonged debility in the children, who were not killed by it. All the children who died were under two years of age. Dr. Black reports that the disease was very prevalent in many parts of the St. Thomas district.

## TUBERCULOSIS.

Under this heading are included all the diseases caused by the tubercle bacillus, chief amongst which is phthisis. From the latter disease, there were 416 deaths in the county against 412 and 479 for the two preceding years. There were also 135 deaths (against 133 and 142 for the two previous years) due to the bacillus in other organs of the body, giving a total of 551, (292 in the urban and 259 in the rural districts) with a rate of 1.22 per 1,000, against 1.20 and 1.38 per 1,000 for the two preceding years.

TABLE XII

### DEATH-RATES.

Districts.	Rates per 1,000 of population.									
	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Urban .. ..	1.41	1.53	1.35	1.37	1.37	1.37	0.98	1.52	1.26	1.27
Rural .. ..	0.97	0.96	1.05	1.07	0.97	0.85	0.98	1.24	1.14	1.16
Administrative County ..	1.19	1.24	1.20	1.22	1.17	1.11	0.98	1.38	1.20	1.22
England and Wales ..	1.80	1.74	1.74	1.77	1.63	1.64	1.60	1.58	..	..

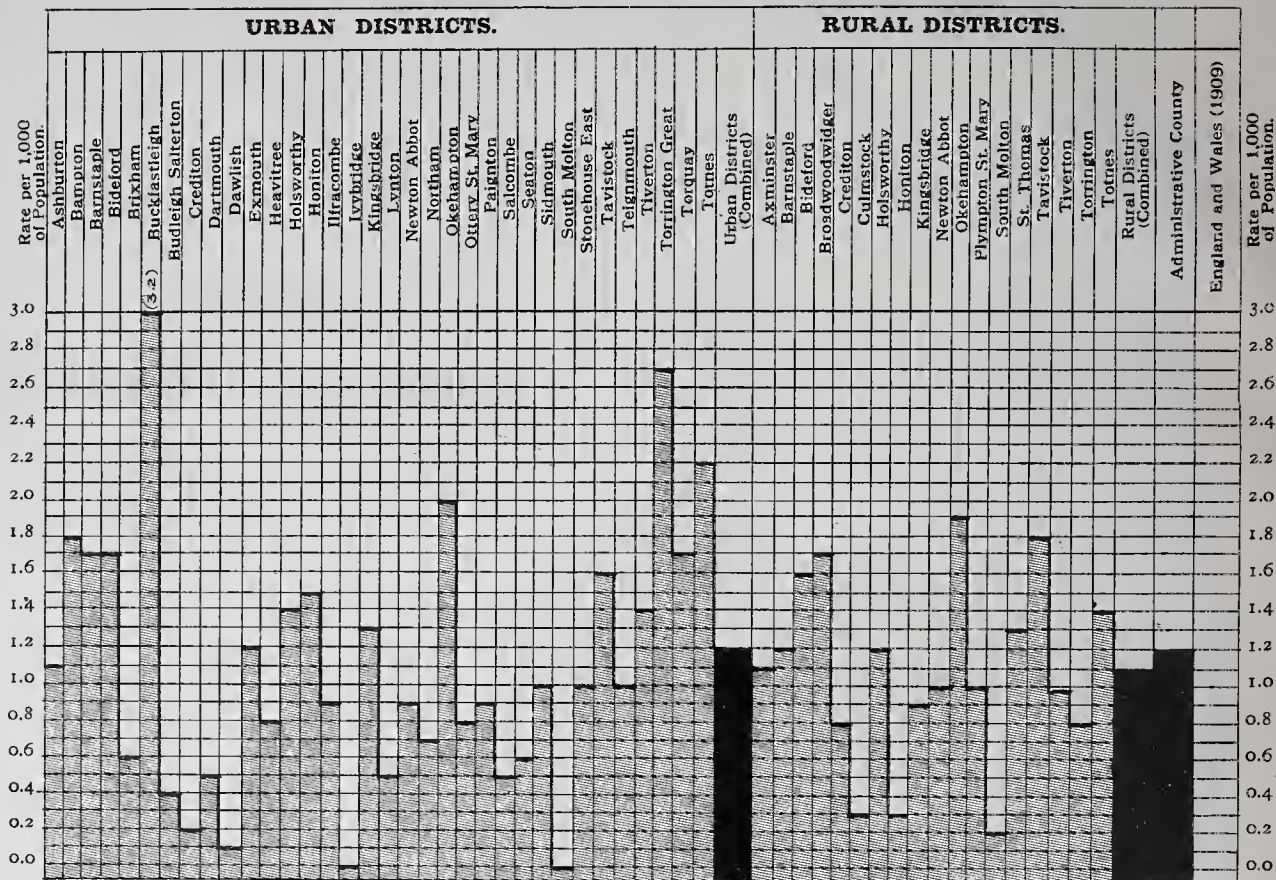




TABLE XIII.

1910.

## TUBERCULOSIS DEATH-RATES.



On referring to Table XII, it will be seen that the death-rate for tuberculosis is slightly higher than last year in both the urban and rural districts, although only to a minimum degree. The rural rate, with the exception of the year 1908, is the highest for the ten years recorded.

The rate for the Administrative County is 1.22.

The columns in Table XIII are again, as in the two preceding years, very irregular, and cannot be relied upon for guidance as to the incidence of the disease, owing to the small population of the different districts. The high column for Great Torrington is still noticeable, but each year it is gradually getting smaller. It stood at 4.9 per 1,000 in 1908; in 1909, it was 3.3, and for last year it is 2.8 per 1,000. This speaks well for the efforts that are now being made to combat the disease. Seventeen cases were notified during the year, and of these 7 were voluntary notifications. Dr. Morse reports, that in addition to voluntary notification, printed rules as to prevention and treatment of tuberculosis have been sent to every house in the town. He visits every case as soon as it is notified. The Town Council provides disinfectants, some of the acute cases were taken to the Cottage Hospital. The spitting by-law is in force.

Dr. Slade-King, in his report on Ilfracombe, remarks—  
 “As regards tuberculosis, the death-rate for phthisis is on the  
 “average so low as 0.6 per 1,000, and it is estimated that more  
 “than one-fourth was due to the advent of strangers, or the  
 “descendants of people, who have been sent to the south-  
 “west as tubercular.” He also remarks that the printed  
 cards marked “Precautions against the spread of Consump-  
 tion,” issued by his Council are more willingly accepted by  
 householders. Dr. Vickers, in his report on phthisis, in  
 Paignton, states “the deaths registered were 10, giving a  
 “death-rate of 0.95 per 1,000. I have so often written of the  
 “necessity of providing a sufficiency of air space about the  
 “dwellings that to do more than refer to it would be simple  
 “re-iteration.”

Dr. Piggott reports that the by-law of the County Council prohibiting spitting in public buildings, has been adopted by the Teignmouth Council. This is a step in the right direction, as one of the means of preventing consumption. Several of the authorities, both urban and rural, have made arrangements for cases of tuberculosis to be sent to Didworthy sanatorium. A voluntary association has been formed at Crediton, to provide health visitors and shelters for patients suffering from tuberculosis in that neighbourhood, and so far, good results are being obtained. Steps are now being taken to form like associations at Tiverton and Okehampton.

The line taken by the Education Committee in providing lessons in the schools, lantern lectures by the medical inspectors and agricultural lecturers, the distribution of literature bearing on the subject, and the visit of the exhibition of the National Association for the prevention of Consumption and other tubercular diseases to the three chief centres of the county, must have, in time, a very great influence in checking this disease. The two Orders of the Local Government Board, dealing with the notification of Tuberculosis in Poor-Law institutions and hospitals, not provided out of the rates, will have a far-reaching effect in dealing with about 60 per cent. of all cases of consumption; but the time has now come when compulsory notification should be imposed on all cases of tuberculosis, wherever occurring. With this, and the provision of the promised Acts for dealing with pure milk and sanatoria, the time will not be far distant when the white plague will be as rare as typhus or leprosy in this country.

## **CANCER.**

During the year 453 deaths (245 in the urban and 208 in the rural districts) were registered for this disease, against 464 deaths for the previous year, giving a rate of 1.00 per 1,000 against 1.03 per 1,000 for the year 1909.





**TABLE XV.**  
**1910.**  
**CANCER DEATH-RATES.**

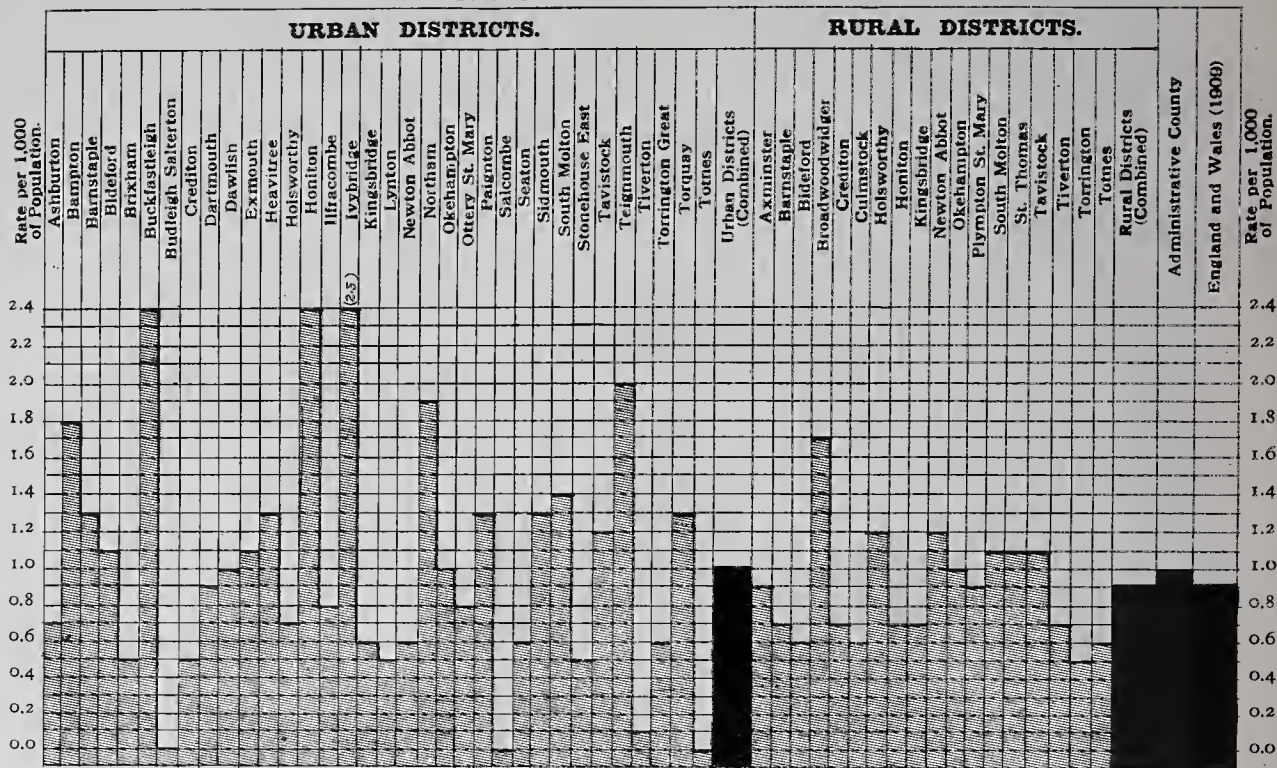


TABLE XIV.

**DEATH-RATES.**

Districts.	Rates per 1,000 of population.									
	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Urban .. .. .	1.11	1.02	1.10	1.02	0.99	1.02	0.95	1.06	1.08	1.07
Rural .. .. .	0.77	0.89	0.90	0.95	0.94	0.83	0.98	0.99	0.97	0.93
Administrative County ..	0.94	0.96	1.00	0.99	0.98	0.91	0.97	1.03	1.03	1.00
England and Wales ..	0.84	0.84	0.87	0.87	0.88	0.91	0.90	0.92	..	..

On referring to the above table, it will be seen that the death-rate is a trifle lower than that for the previous year, and the same as that for 1903. There is very little difference in the respective rural and urban rates. The total rate is .09 more than that for England and Wales, which stands at .91 per 1,000 for 1909.

TABLE XV.

The columns in Table XV again present, as in the previous year, the same irregularities, and from the same causes, as in other rates dealing with statistics in small localities.

No particular comments are made on this disease by any of the medical officers. Research is still active in trying to unfathom the cause and cure of the disease, but the deeper the investigations go the more prominently is the matter brought home, that the disease is brought about by irritation producing perverted cell formation. No specific has been discovered, and operative measures seem to offer the only chance. The cases for heredity and infection are on the wane.

## HOUSE ACCOMMODATION.

One of the most serious subjects at present engaging the attention of sanitary authorities, and surrounded by the greatest of difficulties, has, as far as present day legislation will permit, received a great deal of attention in Parliament. The provision of the Housing and Town Planning Act, if properly administered, will go far to remove many of the injurious influences under which the poor have to live ; but no satisfactory solution seems possible whilst the builder is unable, through initial cost, to meet the demands of the small wage earning population in the matter of rent. Especially is this the case where large families are in evidence. Truly, this is one of many items that are, at present, helping to maintain the low and increasingly lower birth-rate. The machinery for carrying out the Housing Act has been receiving the attention of most of the authorities, and by the end of the year, according to the reports of the medical officers of health, twelve of the urban and eight of the rural sanitary authorities had commenced the new duties imposed by the Act. Many others had the subject under consideration. In nearly all the districts the routine inspection is to be carried out by the present staff of sanitary inspectors, but at Newton Abbot (rural) an additional officer, for the purpose, has been engaged. The medical officer of health, as suggested by the Local Government Board, is to supervise the inspection and suggest remedial measures. At Lynton, the Medical Officer of Health, in his report, states—

“ Under the Town Planning Act, 1909, you have availed  
 “ yourselves of your powers to deal with the discreditable  
 “ dilapidation formerly known as ‘ The Tradesman’s Arms.’  
 “ The owner has received the closure order which must be  
 “ followed very shortly now, either by demolition or re-  
 “ building.” Dr. Young, in his report to the rural authority  
 of Okehampton, states—“ There can be no doubt that the new  
 “ Act is a good one, and if carried out in a proper  
 “ spirit, will lead to a great improvement in our villages.  
 “ Cottages have not often been built in recent years by private  
 “ enterprise, simply for the reason that they do not pay,  
 “ hence recent erections have been mainly by the large land-



“ owners, who have looked at the matter from another stand-  
 “ point. If new cottages are built under the Act (and facilities  
 “ are given for that purpose), there will, in many cases, be  
 “ a general levelling up, and possibly in some cases the rents  
 “ received will be sufficient to pay for interest and loan. In  
 “ others, part of the expenses will have to come out of the  
 “ rates, but money spent in improving the homes of the  
 “ people is not lost, nor wasted.”

With regard to the present accommodation, the cry still comes from the rural districts concerning the lack of new houses, and the unsatisfactory condition of the old cottages in regard to ventilation, floors, dampness, insufficient window space, and bedroom accommodation. From the urban districts there is not much complaint, except at Holsworthy, where Dr. Gray, in his report on the subject, says—“ An extract  
 “ from my report of 1908 on this question will, I venture to  
 “ say, sum up the situation which confronts you. There is  
 “ a most urgent need for at least 25 more cottages with modern  
 “ conveniences to be obtained at a reasonable rent, in order  
 “ to decently house the working classes in the town, who at  
 “ present occupy old and most insanitary dwellings. As  
 “ private enterprise in this direction does not seem to be  
 “ forthcoming, it may be deemed advisable for the Council  
 “ to consider whether it would not be advantageous to the  
 “ welfare of the district to put in force the powers already  
 “ possessed in order to remedy this grave defect.” This was written two years before the Town Planning Act came in force, and the conditions remain practically in *statu quo*. For Ottery St. Mary, Dr. Reynolds quotes the remarks contained in the report of the Local Government Board Inspector—  
 “ The paving of back yards in the town needs more attention.  
 “ Dilapidated cottages in the country parts should be better  
 “ looked after.” Dr. Toye reports that new cottages have now been erected at Appledore, thus relieving some of the overcrowding which he has reported on former occasions.

For the rural districts, the medical officer of health for Axminster reports on the necessity of building by-laws; whilst the medical officer of health for Culmstock states that the

building by-laws adopted in 1904, have had a very salutary effect. Improvement in the general condition of the cottages and the replacement of cobble by asphalt floors are reported in the South Molton and Torrington districts. Several cases of overcrowding are reported in many districts, with the difficulty, on account of the scarcity of houses, of providing a remedy. Sanitary inspectors are loathe to take action, because of the hardships and difficulties that would be imposed upon families in finding other quarters.

### **COMMON LODGING HOUSES.**

Under this heading there is little to report. No additions to the list obtained from the four urban districts are reported. There is not much demand for dwellings of this description in the county, on account of the nature of the occupations carried on. The exception is at East Stonehouse, where Dr. Leah reports that “a special inspection has been made, as “complaints of overcrowding had been received. We have “now adopted the Common Lodging House Act. There are “20 houses ; one was found out of repair. We want more “power to deal with hotels and licensed premises. A very “large number of men from the navy sleep in the town, when “they have leave overnight and consequently the number of “lodging houses is out of all proportion to the size of the place, “and normal conditions. Very few tramps stay here, except “in the workhouse. They mostly stop in the neighbouring “borough of Plymouth.”

### **WATER SUPPLY.**

The water supply of most of the urban districts has been satisfactory during the year. The supply for Bampton requires larger pipes and a better distribution. The Medical Officer of Health for Bideford reports :—“The supply to the “town has been more satisfactory than that of the past years “and ‘intermittance’ has been less. At the upper part of “the town, where complaints have arisen, it has been found “that the delivery pipes will have to be increased in size. “Your Board has not quite solved the question of a more

“ permanent reserve supply, but I am in a position to state  
 “ that steps are being taken with this view, and that the  
 “ augmentation will probably be an accomplished fact during  
 “ the year.” In commenting on the Dawlish supply, Dr.  
 Mapleton says :—“ A constant service was maintained through-  
 “ out the year. This was partly owing to the scraping out  
 “ of the mains, and partly to an ample rainfall. The proposed  
 “ scheme for building an impounding dam at the ‘ Thorn,’ by  
 “ which the winter flow of the springs would be stored, is  
 “ still in abeyance, pending the purchase of the gathering  
 “ ground. At present the Council have possession of a small  
 “ portion of land (about three acres) adjacent to the filter  
 “ beds. It is, in my opinion, very desirable that the town  
 “ should secure the whole of the water shed.” Dr. Eaton,  
 for Exmouth reports that “ the supply throughout the year  
 “ was constant and owing to the exceptionally heavy rainfall,  
 “ was sufficient for all purposes. The work of laying the  
 “ mains for the Dutton boring to the reservoir is now in progress,  
 “ about a mile having been completed.”

The Medical Officer of Health for Holsworthy, after many years of pleading, is now able to report that the provision of a public water supply of excellent quality and abundant quantity is an accomplished fact. The supply was to have been taken over in June, but owing to serious defects in the valve chambers, and much leakage in the service reservoir and pipe track, the Council refused to accept the work from the contractors until these matters had been remedied. Dr. Gray further reports that it will now be necessary to close certain wells in the town, which have been under suspicion for a very long time, and that the health officers are preparing a list to be dealt with.

The water supply of Ivybridge still continues unremedied, but Dr. Cooper states, in his report, that two schemes for amelioration are now under discussion. For Kingsbridge, Dr. Webb states that the schemes propounded by the Surveyor for increasing the distribution of the water supply and the provision of hydrants have been completed. For Lynton, Dr. Edwards draws the attention of his authority to the strain



put on the filters in times of flood, owing to the want of storage, and he recommends the acquisition of more land for the purpose. For Northam, Dr. Toye reports that the additional two filter beds for the Melbury supply are nearing completion. For Ottery St. Mary, Dr. Reynolds quotes from the report of the Local Government Board Inspector, who recently inspected the district :—“ Expert advice as to the means of improving “ the high level town water supply should be acted upon “ without delay. Leaking taps should be attended to. “ Periodical chemical and bacteriological analysis of the town “ water should be made, as well as all suspicious country “ supplies. All such supplies, especially those from roadside “ ‘ shutes ’ and shallow wells, should be protected from con- “ tamination.” For South Molton, the shortage has been remedied by the successful scraping of the service mains, which were greatly encrusted by deposit from vegetable organism. Nothing has been done to improve the filtration of the water, or to cover the reservoir, to protect it from dust. Dr. Piggott still urges the desirability of a constant supply of water for Teignmouth. For Tiverton, the provision of a new reservoir is about to be carried out.

The same remarks in regard to the unsatisfactory water supply in the rural districts (with the exception of Okehampton) of North and East Devon still hold good for this year. Until sanitary authorities realise that an abundant public supply of wholesome water for drinking and domestic purposes for every village is necessary to health and cleanliness, they have failed to carry out the most important duty laid on them, both in regard to moral and statutory requirements, and no medical officer of health for a rural district should rest satisfied until he sees every village in his district so provided. The present day water engineer is able by means of ram, oil engine pumps, and other means, to overcome all the physical disabilities that existed in days gone by. Dr. Langran thinks an improved water supply is required for Axminster town, Kilmington, Chardstock, and All Saints (Axminster). Dr. Harper reports that the new supply of water, from the Barnstaple Company, has been obtained for Instow, and that the condition



of the supply of Georgeham, where typhoid fever and diphtheria are constantly recurring, is under consideration. The Bideford district is chiefly supplied by shallow surface wells, some of them open dipping wells. Sixteen samples of water analysed from these wells showed them to be polluted. The Broadwoodwidge district, which has no large villages, is supplied by shallow wells. The Crediton district, with the exception of the villages of Bow and Zeal Monachorum is dependent on shallow wells, many of which (notably those of Morchard Bishop) are liable to pollution. In the Kingsbridge district the water supply of Kingston has been improved. That of Stokefleming has not been remedied, and the Medical Officer of Health states in regard to Aveton Gifford, "that the remarks "in former reports still apply." For Newton Abbot, Dr. Mapleton states that the supply for Hennock is still in abeyance, and the supply for Ilsington and adjoining villages is not yet carried out. For North Tawton, Dr. Young reports that the new supply is still unsatisfactory on account of the green colour produced by algæ. The Chagford present supply wants augmenting. Lake (Sourton) has been provided by the owner with a new supply of water, and in contrast to many other districts, he remarks that three villages, Drewsteignton, Northlew, and Exbourne *still* remain supplied by wells.

Dr. Noy Scott, for Plympton St Mary, reports:—"During "the past few years the water supply of the district has been "steadily improved and the Council is persistently endeavouring "to satisfactorily fulfil its statutory duties as a provider of public "supplies of water, and as evidence of this I merely note "the fact that during my tenure of office, good and efficient "public supplies have been established in Plymstock, Dunstone, "Yealmpton, Cornwood, Sutton, Egg Buckland, and Spark- "well." The Medical Officer of Health for South Molton reports that a few of the large villages have public supplies, others rely on wells. Samples of water taken from 20 of these proved 14 to be polluted. A new supply for North Molton is under the consideration of the Local Government Board. Dr. Black has made a special report on the water

supply of Lymptone in the St. Thomas district, showing that over 100 houses are supplied by a single pump from one well. The well never runs dry and a chemical examination of the water revealed no contamination. He advised a new supply for better distribution and for avoiding the present hand flushing of the water closets, but his advice has not been acted upon. Dr. Brodrick reports for the Tavistock district, that a new supply of water has been obtained at last for Peter Tavy, and that an extension of the supplies has been carried out in the villages of Horrbridge and Whitchurch. He reports that a new water supply, which has been the subject of past reports, is required for Mary Tavy. Dr. Slade-King reports that the public supplies of Winkleigh, Beaford, Sheepwash, Langtree, Dolton, and Little Torrington, in the Torrington district, have been cleaned out and repaired. Dr. Jellicoe reports for the Totnes district, that the supply for Stoke Gabriel has been increased and is now sufficient. The Diptford extension is to be carried out. Negotiations are still proceeding for supplying Marldon from the Paignton supply, but nothing has been done to remedy the condition of the supplies of Holne and Ugborough.

PLUMBO SOLVENCY.—Dr. Slade-King, in commenting on the excellency of the water supply of Ilfracombe, which is described by the analyst as a water of great purity, and from a chemical point of view admirably suitable for drinking purposes, states that on account of its softness and liability to take up lead, the Ilfracombe Council, in its desire to protect in every way the public health, absolutely forbids the use of lead pipes in distributing water for domestic purposes.

Dr. Piggott, for Teignmouth, reports that the extra filtration employed by the Paignton Council has effectually removed the lead erosive properties of their moorland water.

Dr. Young reports two cases of lead poisoning caused by lead pipes from the pumps attached to wells in the Okehampton district.

In order to show where attention in the matter of improving water supplies in the different districts is necessary, the following list has been drawn up :—

AXMINSTER	— <i>Hawkchurch, Axminster Town, Kil-</i> <i>mington and Chardstock.</i>
KINGSBRIDGE	— <i>Stokefleming and Aveton Gifford.</i>
NEWTON ABBOT	— <i>Hennock and Ilsington.</i>
PLYMPTON ST. MARY	— <i>Newton Ferrers.</i>
OKEHAMPTON	— <i>North Tawton and Chagford.</i>
ST. THOMAS	— <i>Lympstone.</i>
TAVISTOCK	— <i>Mary Tavy.</i>
TOTNES	— <i>Holne and Ugborough.</i>
HOLSWORTHY	— <i>Black Torrington.</i>
SOUTH MOLTON	— <i>Filtration and covering of reservoir.</i>
IVYBRIDGE	— <i>New supply.</i>
LYNTON	— <i>New storage.</i>
OTTERY ST. MARY	— <i>New supply for Tipton St. John.</i>
BARNSTAPLE (rural)	— <i>Georgeham.</i>
CREDITON (rural)	— <i>Morchard Bishop.</i>

(Those in *italics* have been previously reported on.)

## MILK SUPPLY.

This very important subject has of late years been especially brought before the general public by Health Authorities and the Press. In view of the contemplated legislation on the matter, the milk supply will have to be seriously taken in hand. The conditions of the actual dairies themselves, with the exception of being used for the storage of other commodities, are fairly satisfactory, but their surroundings, water supply, and the conditions under which the cows are milked and housed in the cowsheds, must no longer be tolerated. The final report of the Royal Commission on Tuberculosis states that the cow and its milk are now proved to be a source of a large amount of tuberculosis, especially among children. The reports of all the medical officers of health deal with the condition of the milk supply. To quote extracts from some:—Dr. Harper, for Barnstaple (urban).—"There has been no reason to question the character and wholesomeness of the milk sold in the town. There are 36 dairies on the register, and all are regularly inspected. No recent examination



“ has been made to ascertain the presence of the tubercle bacillus in the milk. It is intended to do so during the early part of next year. At the last examination, two years ago, the result was most satisfactory.” Dr. Eaton, for Exmouth, who complained of the unsatisfactory condition of the cowsheds in his last report, recommends this year that legal proceedings should be taken in the cases of large accumulations of manure in the proximity of the cowsheds. Dr. Slade-King, for Ilfracombe, says :—“ The condition of the dairies, etc., is most satisfactory, but in some cases more attention should be paid to the straining of the milk.” He recommends for the more wholesome condition of the milk supply, that (*a*) the milker should be responsible for seeing that the can which he uses is thoroughly clean ; (*b*) the cow’s flanks and udders should be sponged over and rubbed dry with a rough cloth before milking ; (*c*) the milker should wear a clean overall when milking ; (*d*) care should be taken that all milk sent from a distance should be contained in cans provided with dust-proof covers.

For Okehampton, Dr. Young reports that one unsatisfactory cowshed has been closed, and a new one erected. Dr. Reynolds reports that the Local Government Board Inspector suggested that there should be a better enforcement of the existing regulations, under the Dairies, Cowsheds, and Milk Shop Order in the Ottery St. Mary district. Dr. Twining, in reporting on the condition of the milk supply of Salcombe, says :—“ With regard to the cowsheds, I think it is high time the landlords were called upon to put these buildings on their property in order ; as long as the floors remain badly paved and the gutters badly laid, so long will it remain impossible for the cleansing of the houses to be carried out efficiently.” Dr. Brodrick reports that the structural condition of most of the cowsheds in the urban district of Tavistock are unsatisfactory. In his report for Torquay, Dr. Dunlop describes the method of dealing with cowsheds outside the borough, from which milk is supplied to the town. These are inspected twice a year, particulars are obtained as to the cleanliness, lighting, ventilation, paving, the washing of milk



vessels, water supply, and the number and condition of the cows milked. These are compiled in a register, which is printed in the form of a bill, copies of which are posted throughout the town, and are also sent to the farmers and dairymen concerned. Although this transient inspection cannot guarantee that all is well during the whole year, still it ensures a certain amount of control over the rural and urban milk supplies.

In some of the rural districts, a great deal of uncertainty exists as to the necessity of the registration of dairies, on account of the indefinite construction of the Dairies, Cowsheds, and Milk Shops Order, 1885, in which, under Section (6) (b) “A  
 “ person who sells the milk of his own cows in *small quantities*  
 “ to his workmen or neighbours, for their accommodation, shall  
 “ not, for the purposes of registration be deemed to be a person  
 “ carrying on the trade, etc., and need not, therefore, be  
 registered.” A great many dairies, therefore, escape inspection but are nevertheless supplying milk of a doubtful nature to the public, as medical officers of health and sanitary inspectors hesitate to take proceedings. This is a matter to be deplored, as it should be left to the defendants to prove that they are not evading the Order. In this connection, the medical officer of health for Bideford states—“As pointed  
 “ out in my last annual report, a considerable number of  
 “ persons in the district sell milk, whose names do not appear  
 “ upon the register. The omission has been brought to  
 “ the notice of the Council, and I have suggested the advisa-  
 “ bility of acquainting dairymen, by means of notices, in the  
 “ local newspapers, of the necessity for registration, but up  
 “ to the present there has been no disposition to take any  
 “ action with reference to those purveyors of milk, whose  
 “ names do not appear on the register.” The Medical Officer of Health for Broadwoodwidge states that there are no registered milkshops or dairies in this district. Dr. Date also states that there are none registered in the Culmstock district, and that the cowsheds are bad and the process of milking unsatisfactory. Dr. Reynolds says that the chief fault of the dairies in the Honiton rural district is, that they are used for storing other food and the cowsheds do not conform to the regulations.

Dr. Body reports that there is an improvement in the cowsheds in the South Molton district.

A simple plan to ensure the cleanliness of the cows and udders is being adopted in some of the cowsheds. It consists in making a wide shallow gutter, situated in rear of the cows, when they are tied up. This necessitates the cow keeping forward and not lying down in its excrement. A model, illustrating this, kindly made by Dr. Mapleton, of Newton, can be seen any time at the office of the County Medical Officer.

## **SEWERAGE.**

Activity in this matter is still observed in nearly all the districts, but there are a few districts in which necessary improvements are in abeyance,

*Urban districts.*—Dr. Elliott reports for Brixham that now there is an ample supply of water, the provision of suitable flushing tanks for the water closets is going on steadily; also, that owing to the large number of houses in the Furzesham district, large sewers and more ventilating shafts are necessary; and a new culvert is required at Bolton Cross. For Budleigh Salterton, a scheme costing £10,000 has been approved of by the Local Government Board, for removing the present outfall in the centre of the beach to a point beyond the entrance of the river Otter. When carried out this will add to the benefit of the town as a health resort. The sewerage of Crediton, an urgent matter, is still under discussion by the urban authority. For Exmouth, Dr. Eaton reports—“Considerable extension and improvement of the sewerage scheme have been carried out during the year. The construction of flushing tanks along the course of the mid-level sewer, for which the sanction of the Local Government Board was obtained, in May, is now in active progress. Four of the eight tanks have been completed, and so far have proved an unqualified success in removing the sedimentation and stench arising from the sewers.” He also mentions the important fact that the water test for drains is coming more into use year by year. For Holsworthy, Dr. Gray states that in his annual report for 1909,



he commented on the crude and most unsatisfactory condition of the present system of sewage disposal, a system comprising outfalls of comparatively untreated sewage, creating nuisances on all sides of the town. The installation of the new water supply will necessarily add to the volume of the sewage. Extension of the present system is impossible, and he strongly urges the Council for health and financial reasons, to take the matter in hand at once, as no progress has been made during the past year. For Northam, Dr. Toye again draws the attention of his authority to the unsatisfactory condition of the outfall sewers at Appledore, Northam, and Westward Ho!

For Ottery St. Mary, Dr. Reynolds, after drawing the attention of the Council to the necessity of a public urinal, quotes the remarks of the Local Government Board Inspector—“The question of proper sewerage and sewage disposal (*e.g.* “by septic tanks or bacteria beds with subsequent land “filtration) should be considered with reference to some of “the larger and more compact villages in the district; more “rapid substitution of pit privies by pails, and if possible “water closets in the rural parts.” At Seaton, the outfall sewer has been carried further out to sea, with satisfactory results. At South Molton, the septic tank near the river has had a filter added to it, in order to prevent river pollution. For Teignmouth, Dr. Piggott again reports that the outfalls of the main sewerage require attention. The overhauling and renovating of the main sewer and sewage outfall works at Tiverton are in progress.

*Rural areas.*—The following are some of the improvements required or carried out. Axminster—Improvements wanted for Axminster, Kilminster, Chardstock, Colyton, Musbury, Axmouth and Stockland. For Barnstaple, Landkey and Bishopsteignton require a modern system of drainage. For Broadwoodwidge, Dr. Gibson comments on the satisfactory conditions of the pail system now in vogue. In the Crediton district new sewers have been laid at Sandford and Coleford, and a further extension of the sewers completed in Cheriton Fitzpaine. For the Culmstock district, Dr. Date reports that the Mill Moor sewer is near completion, and that

the sewage outfall at the south side of Culmstock is unsatisfactory and needs remedying. Dr. Gray again comments on the urgent necessity of a scheme at Halwill station, in the Holsworthy district. Dr. Reynolds reports for Honiton, that the septic tank systems at Sidbury and Sidford are being overhauled. The condition of the sewerage at Sidmouth Junction is still unsatisfactory. The extension at Plymtree has been carried out, and all pit privies are being replaced by earth closets, 57 of such being converted during the year. Dr. Webb, for Kingsbridge, states that a new scheme for Bigbury is under consideration, but his previous reports on the conditions of Sherford and Modbury still hold good. Dr. Mapleton, for Newton Abbot, reports the following new work:—

*Abbotskerswell*.—A short sewer return made ; negotiations for outfall works proceeding.

*Chudleigh*.—Old stone sewer replaced by pipes ; site for septic tank has been purchased.

*Hennock*.—Sewerage for 60 new houses in preparation.

*Ipplepen*.—Extension of sewer and new outfall works constructed.

*Kingsteignton*.—Sewer re-constructed.

*Lustleigh*.—Sewer extension effected.

*Widecombe*.—Brick channelling and a short sewer constructed to take slop water.

For Bridestowe, in the Okehampton district, Dr. Young reports on the necessity of a new scheme to prevent the pollution of the stream. In the Plympton St. Mary district, the important drainage scheme for Elburton has been carried out and improvement works done at St. Budeaux, Tamerton, Plympton St. Mary, and Sparkwell. New drains have been laid at Chittlehampton, Chittlehamholt, and Romansleigh in the South Molton district. For St. Thomas district a new scheme is being carried out at Exminster, the outfall at Ide has been completed, a new sewer has been laid at Topsham,



and extensions have been carried out at Alphington, Pinhoe and East Budleigh. For Tavistock, Dr. Brodrick reports that drainage schemes are required at Walkhampton, Clearbrook, and Lydford; whilst extensions are required at Lifton, Beer Ferrers and Whitchurch. Dr. Pollock reports that new drains have been laid in many of the villages in the Tiverton district. In the Torrington district new sewers have been laid down at Dolton, Little Torrington, Winkleigh, and High Bickington. For Totnes, the Medical Officer of Health reports that the new outfall sewer at Kingswear has been completed, new drainage carried out at Ashprington, and an extension made at Ugborough. Schemes for the drainage of Galmpton and Churston Ferrers are under consideration.

The following is a list of the districts in which an unsatisfactory condition of the drainage exists :—

AXMINSTER	– <i>Axminster</i> , Kilmington, Chardstock, Colyton, Musbury, Axmouth, and Stockland.
BARNSTAPLE	– <i>Georgeham</i> , Landkey, and Bishops Tawton.
CULMSTOCK	– South side of Culmstock.
HOLSWORTHY (rural)	– <i>Halwill station district</i> .
HOLSWORTHY (urban)	– <i>New outfalls required</i> .
HONITON (rural)	– <i>Sidmouth Junction</i> .
HONITON (urban)	– <i>New outfall works required</i> .
KINGSBRIDGE (rural)	– <i>Sherford</i> and <i>Modbury</i> .
OKEHAMPTON (rural)	– Bridestowe (pollution of river).
TAVISTOCK	– <i>Walkhampton</i> , <i>Clearbrook</i> , <i>Lydford</i> , New scheme extension at Lifton, Beer Ferrers, and Whitchurch.
CREDITON	– <i>Fordton</i> .
NORTHAM	– <i>Appledore</i> , <i>Northam</i> , and <i>Westward Ho!</i> (outfalls).
OTTERY ST. MARY	– <i>Tipton St. John</i> .

(Those in *italics* have been previously reported on.)

## **SALE OF FOOD AND DRUGS ACTS.**

Again, as for last year, there has been more activity displayed in the taking of samples by the inspectors, both in quantities and varieties. There were 107 more samples taken than last year and 173 more than the preceding year, the rates being 1.4 per 1,000 of the population against 1.2 and 1.0 for the two previous years. The minimum rate recommended by the Local Government Board is 2 per 1,000.

In a covering letter, dated July 25th, 1910, attached to the County Medical Officer of Health (Duties) Order, 1910, of the Local Government Board, attention is drawn to the advisability of County Councils, where the medical officer of health is not directly responsible for carrying out the Sale of Food and Drugs Acts, that they should be carried out in consultation with him by the officer administering the Acts. Arrangements, under this advice, have now been made by the Public Health and Housing Committee, by which the police who are the officers appointed under the Acts, can consult the County Medical Officer in desirable cases.

The following are some accounts of the action of the officers of the sanitary authorities in dealing with food supplies. At Barnstaple (urban) 40 samples of food were taken by the Local Food and Drug Inspector. Two specimens of milk were found adulterated with water, and in both prosecutions and convictions followed. At Bideford, 14 samples of milk were analysed and all found of good quality. The Sanitary Inspector here acts as Meat Inspector and takes samples under the Food and Drugs Acts. At Brixham, Dr. Elliott reports that many lots of shell fish were destroyed as being unfit for consumption. At Ilfracombe, Paignton, South Molton and Tavistock, carcasses of tuberculous cows were seized and destroyed. At Torrington a consignment of plums, exposed in the street, was seized and condemned, and the offender fined. At Teignmouth and Tiverton the Sanitary Inspectors take samples under the Food and Drugs Acts. At Torquay, the Sanitary Committee are asking the Local Government Board to amend the by-law, so as to allow one of the

Assistant Sanitary Inspectors (who holds a diploma for meat inspection) to inspect and seize unsound meat. Under the Food and Drugs Act, the County Police took 82 samples of food in Torquay, of which number 3 samples of milk and one of lard were found adulterated. A conviction was obtained in one of the lard cases, but the police thought it sufficient to merely caution the milk offenders. At St. Thomas, a large consignment of decomposing fish was condemned and destroyed.

As the police divisions do not in any way correspond with the sanitary districts, it is difficult to give the number of samples taken in each district. There are 13 police divisions, and in analysing the procedure in the different divisions, there is found to be a great difference in the number and nature of the samples taken. The rates vary between 2.7 per 1,000 in the "F" division, which embraces Torquay, Brixham, Kingswear, Paignton, and Newton Abbot, to 0.2 per 1,000 in "M" division, which embraces the districts of Great Torrington, Bideford (rural), Appledore, Northam, Clovelly, and Hartland. In one division "E," which comprises the towns of Exmouth, Ashburton, Dawlish, Bovey, Buckfastleigh, Moretonhampstead, and Chagford, all of which are health resorts, not a single sample of milk was taken for the year. The following are the rates per 1,000 of the samples taken in the different divisions.—Barnstaple (including Ilfracombe), 0.8; South Molton, 0.9; Cullompton, 1.1; Honiton (which includes Axminster and Ottery St. Mary), 0.5; Exe (which includes Heavitree, Exmouth and Budleigh Salterton), 2.2; Teignmouth, 1.3; Torquay, 2.7; Totnes (which includes South Brent and Kingsbridge), 1.0; Stonehouse (including Plympton), 1.2; Tavistock, 1.3; Holsworthy (including Hatherleigh), 1.1; Torrington (including Bideford and Northam), 0.2, and Crediton (including Okehampton), 0.6.

The following table gives particulars of the samples taken by the police :—



**FOOD AND DRUGS ACTS.**

Total Number of Samples, 649.

(28 different sorts.)

Articles	No. of Divisions giving Samples.	Samples.	Adulteration.	Prosecutions.	Fines.
Arrowroot ..	..	..	..	..	..
Baking Powder ..	..	..	..	..	..
Bread ..	3	8	..	..	..
Butter ..	9	56	..	..	..
Cheese ..	3	4	..	..	..
Coffee and Chicory ..	10	23	1	1	..
Confectionery ..	3	7	..	..	..
Cocoa ..	2	5	..	..	..
Corned Beef ..	1	1	..	..	..
Cream ..	2	5	..	..	..
Flour ..	1	1	..	..	..
Ginger ..	2	2	..	..	..
Golden Syrup ..	2	2	..	..	..
Honey ..	..	..	..	..	..
Lard ..	10	78	3	3	6s. 6d., 16s., 25s.
Margarine ..	5	50	..	..	..
Milk ..	12	201	21	10	35s., 20s. 6d., 23s., 49s. 6d., 10s., 40s., 20s.
Mustard ..	2	2	..	..	..
Oatmeal ..	1	1	..	..	..
Pepper ..	8	16	..	..	..
Pickles ..	2	2	..	..	..
Preserves ..	4	20	..	..	..
Rice ..	10	28	..	..	..
Sago ..	1	1	..	..	..
Spirits and Beer ..	11	85	7	3	17s. 6d., 20s., 20s.
Sugar ..	4	9	..	..	..
Tea ..	8	24	..	..	..
Vinegar ..	6	18	..	..	..

**POLLUTION OF RIVERS.**

The Annual Report of the County Medical Officer is now required to contain, by the order of the Local Government Board, a special section on the pollution of streams within the county, and as to the steps for the prevention of pollution taken :—

- (1) By the local authorities, and
- (2) By the County Council.



The following are extracts taken from the reports of the district medical officers of health, with an account of any action taken by the authorities concerned and the County Council.

*Urban Districts.*

BAMPTON.—Greater part of the sewage carried into streams. The Local Authority is discussing means for preventing this pollution. The County Council has called upon the Local Authority to abate the offence.

KINGSBRIDGE (urban).—Properties previously polluting the estuary have carried their drainage into the main sewerage system.

NORTHAM.—Orchard Hill and Appledore drainage pollute the river Torridge. The Burn on the Burrow at Westward Ho ! polluted by the sewer, causing a great nuisance. Bulkley sewage passes into a stream going through several dairy farms. No action taken by the Local Authority.

PAIGNTON.—No stream seriously polluted.

CREDITON.—The hamlet of Fordton pollutes a branch of the river Creedy. Local Authority is discussing schemes to prevent this. County Council has approached the Local Authority on the matter.

HONITON.—The greater part of the sewage of this town goes into the river Otter. The Local Authority has taken no action to prevent this pollution. The County Council has appealed to the Authority and now threatens action under the River Pollution Acts.

*Rural Districts.*

AXMINSTER.—River Axe polluted by Colyton, and other large villages drain into streams. No action taken by the Local Authority. The County Council has approached the Local Authority several times on the subject.

HOLSWORTHY.—Streams which run along the south side of the town are much polluted by the drainage of the urban

district, and complaints, as to damage to the cattle grazing in the fields adjoining, are received. No action taken by the Local Authority. The County Council has made several representations on the matter.

KINGSBRIDGE.—Pollution of mill stream at Modbury frequently complained of by Medical Officer of Health. No action taken by the Local Authority. The County Council, after several appeals, has threatened action under the River Pollution Acts.

PLYMPTON ST. MARY.—On the whole, free from any serious pollution.

TAVISTOCK.—No pollution of rivers.

TIVERTON.—“None are polluted by effluents from factories.”

Several complaints have been received, however, from the Exe Board of Conservators, of the pollution of the river Culm. Special reports have been made by the County Medical Officer. Representation on this has been made by the County Council to the different parties concerned. No action has been taken by the Local Authority. The County Council has approached the Local Authority and threatened action under the River Pollution Acts in regard to the sewage outfalls of Cullompton and Uffculme.

NEWTON ABBOT.—Several minor cases of pollution are reported, viz., at Abbotskerswell, Chudleigh, Kingskerswell, Coombe and Stoke, and Chudleigh Knighton. These sources are receiving the attention of the Local Authority.

## **SCAVENGING.**

The necessity for the speedy and effective removal of all garbage and house refuse from the vicinity of dwellings is again dwelt upon by many of the medical officers of health, especially in the urban districts; but far greater attention is required in this matter in the rural districts, where large heaps of house and stable refuse are allowed to accumulate in uncovered heaps, and become breeding grounds for flies, which, late

researches have shown, are often the "carriers" of diseases. Especially does this apply in the matter of cowsheds, dairies, and milk shops.

*Urban districts.*—Dr. Eaton reports that galvanised bins are being more generally used in Exmouth. Dr. Webb again draws the attention of the Kingsbridge Urban Council to the evasion of the by-law in regard to covered utensils for house refuse. Dr. Reynolds reports for Ottery, "It would be well if the Council insisted on house refuse being placed in covered bins. At present it is frequently put in open boxes, the contents of which are often blown about the streets by the wind or dragged out by cats and dogs." He also reports that the fortnightly cattle market in the principal street of the town constitutes a serious periodic nuisance, and also that the Local Government Board Inspector has suggested that the Council might undertake systematic scavenging for some of the larger hamlets, where at present no public scavenging is done. Dr. Vickers, for Paignton, reports "The removal of house refuse is carried out by the Council staff, and is proving very satisfactory. Since the refuse destructor has been at work, the great nuisance has been obviated of finding tipping places for the refuse." Dr. Pattinson reports, for Seaton, "I must again express regret that very few householders have, as yet, adopted suitable covered buckets for conveying the house refuse to the cart." The disposal of refuse at Stonehouse is again the subject of serious complaints, both by the Medical Officer of Health and Sanitary Inspector. The former states, in reference to the refuse being directly tipped into the barges, instead of being allowed to accumulate on the Quay. "This is not carried out. There are difficulties, no doubt, but not enough to excuse the flagrant way in which this clause is ignored." The Sanitary Inspector states—"The removal of the refuse by the contractor is far from being satisfactory. This is in my opinion a very serious matter, seeing that (especially in the summer months, viz. May, June, July, and August), there were in each case twenty days and over in which



“refuse was remaining on the Quay.” For Tiverton, Dr. Cullen suggests that steps should be taken for a better method than dumping rubbish in heaps by the roadside.

The County Medical Officer in his visit in January discovered that there were no ash bins in the Holsworthy district.

*Rural districts.*—Dr. Harper reports that scavenging is urgently required for Braunton, the largest village in the Barnstaple rural district. For Honiton, Dr. Reynolds states that—“during the year a by-law was framed and adopted, “whereby occupiers of houses can be compelled to dispose “of their own house refuse.” He also thinks that the Council might well undertake systematic scavenging in some of the larger villages. In Plympton St. Mary, Dr. Noy Scott again draws attention to the advantage of the County Council by-laws relative to the carting and depositing of rubbish and offensive matter. He states—“The enforcement of these “by-laws would provide a prompt remedy, for it is to be “noticed that no proof of ‘legal nuisance’ is necessary. The “offence is described simply and clearly and the only thing “to be proved would be the fact of doing what is forbidden.”

## **SLAUGHTER HOUSES.**

The conditions surrounding the slaughter of cattle and the means of preventing the sale of unsound meat will not be remedied until private slaughter houses are abolished, and meat inspection is carried out by qualified officers. The condition of most of the private slaughter houses, both in urban and rural districts, are not as they should be, both in regard to situation, construction, inspection, registration, and compliance with the necessary by-laws. Many of them are situated in the most populous part of the towns. For instance, in Sidmouth, the Sanitary Inspector states that 4 of the 6 slaughter houses are situated in the busiest part of the town. The same remarks apply to Bideford. The chief structural defects are the condition of the walls, floors and ceilings. All of these are liable to retain deleterious matter, which may infect the meat. It is difficult to carry out inspections during the time of slaughtering, as no fixed hours are



stated for the private ones. The Torquay Inspector (who is a qualified meat inspector) managed to visit his 8 slaughter houses 528 times during the year. The statutory notices, as to registration or licensing, are not affixed in the urban districts of Ashburton, Bampton, Crediton, Dawlish, Exmouth, Holsworthy, Honiton, Lynton, Northam, Ottery St. Mary, Paignton, Seaton, Tiverton, and Torrington, nor have steps been taken in the rural districts in this connection, with the exception of Barnstaple, Crediton, and St. Thomas. The Sanitary Inspector for Axminster complains that the necessary section of the Act of Parliament has not been adopted. The by-laws are hung up in Exmouth slaughter houses.

Seizures of meat in an unsound condition in the urban districts are reported from Ilfracombe (1), Paignton (1), South Molton (1), Tavistock (3), and Torquay (127). With the exception of Holsworthy (1) not a single case is reported in any of the rural districts.

For Okehampton, Dr. Young reports that two old slaughter houses have been closed and to replace these, new ones have been built outside the town. Dr. Vickers reports for Paignton that in a Bill before Parliament, powers are sought to build a public and close all private slaughter houses. Then all animals intended for human consumption will be killed under the supervision of a meat inspector. For Tavistock Dr. Brodrick again suggests that metal bins should be substituted for wooden casks in the removal of offal. For Teignmouth, Dr. Piggott says a public abattoir is required, but at the same time licences are only granted for one year, depending upon good conduct. In Great Torrington, two new slaughter houses have been erected to replace old defective ones. The same is being done in the case of a slaughter house in the Culmstock district. The Sanitary Inspectors for Holsworthy and Okehampton state that all the slaughter houses in their districts are more or less structurally defective. Improvements have been carried out at Lynton in cementing the walls to present a smooth surface, for cleaning purposes.

### **BAKEHOUSES.**

There is little to report in regard to the above, as most of them are stated to be in a satisfactory condition, and the

occupiers are complying with the provisions of the Factory Acts, in relation to bakehouses. There are very few complaints as to the special lime washing. The conditions of the health of the baker and the manner in which bread is baked, stored, and sold, will probably come under review when the more pressing questions in connection with other food supplies are settled.

New floors to houses requiring them, have been placed in Ashburton, Crediton, and Tavistock. Defective w.c.'s in connection with bakehouses have been remedied at Dawlish and Heavitree, with the addition of a dust bin at the latter place. The improved ventilation of a bakehouse at Ottery St. Mary is reported, whilst at Tavistock (urban) one bakehouse has been closed on account of structural defects, one has had a new floor and walls repaired, and two have had old floors concreted. Broadwoodwidge has the distinction of having no bakehouse within its district.

### **FACTORIES AND WORKSHOPS.**

A copy of the requirements in regard to inspection by the medical officers of health under the Factory Acts is appended to the Annual Report from each district. Offensive trades are reported to be in existence at Barnstaple, Sidmouth, Tavistock and Torquay, in the urban districts, and at Colyton (Axminster), Pyworthy (Okehampton), Newton Ferrers, Plympton, and Tavistock in the rural districts; but no complaint is made as to the manner in which they are conducted. No serious complaints are forthcoming as to the condition of any of the factories, workshops, or conditions of the outworkers. The ventilation of a workshop at Crediton has been remedied. Minor sanitary defects are reported as receiving prompt attention in the districts of Heavitree, Paignton, Tavistock, Bideford, Culmstock, Plympton, St. Thomas, and Torrington. Dr. Dunlop reports cases of illness among the employees in a large laundry at Torquay, due to fumes and escape of gas. On reporting the matter to H.M. Inspector, the ventilation was at once remedied.

Dr. Gooding reports for Bideford (urban) that the lists of outworkers for which he had asked for so long, were now forthcoming.

## **ADOPTIVE ACTS AND BY-LAWS.**

In the last report the number of Adoptive Acts which were in operation in the different districts was given.

The Public Health Acts (Amendment Act) 1907, was the one receiving the least attention, as it had only, or parts of it, been adopted in 16 of the urban and one of the rural areas. This is to be regretted, as it contains many sections valuable for better sanitary government. During the year under review, there is no mention made of further adoption of any Acts in any of the districts.

With regard to by-laws: All the urban districts, as might be expected, have building by-laws. The same cannot be said of all the rural districts, for the district councils of Axminster, Broadwoodwidge, Crediton, and Holsworthy have not kept abreast of the times in this matter.

By-laws for dealing with common lodging houses are in force at Barnstaple, Budleigh Salterton, Crediton, Dawlish, Exmouth, Holsworthy, Newton Abbot, Seaton, South Molton, East Stonehouse, Teignmouth, Tiverton, Torrington, Torquay and Totnes.

Regulations (Dairies, Cowsheds, Milkshops Order) are in force in all the urban districts, with the exception of Honiton, and all the rural districts, with the exceptions of Broadwoodwidge, Crediton, and Culmstock.

By-laws in relation to nuisances have been adopted in Ashburton, Brixham, Crediton, Dawlish, Exmouth, Heavitree, Holsworthy, Ilfracombe, Newton Abbot, Okehampton, Ottery St. Mary, Paignton, Seaton, Tavistock, Teignmouth, Torrington, Torquay, and Totnes; and in the rural districts of Bideford, Newton and Okehampton. Dr. Reynolds reports that a by-law dealing with scavenging has been framed and adopted for the Honiton rural district. Dr. Black advises the extension of the St. Thomas' building by-laws for Exminster. Dr. Webb reports that the building by-laws in Kingsbridge have been relaxed in certain cases on account of the unprofitable building of artisans cottages.

Dr. Reynolds states for Ottery St. Mary :—" The Infectious Diseases Prevention Act and the Public Health Amendment



“ Act are to be adopted in the beginning of the new year, “ and by-laws under the latter Act are to be framed at an early “ date.” Dr. Piggott reports that the County Council by-law in regard to spitting is now in force at Teignmouth.

### **MIDWIVES ACT, 1902.**

During the year, 344 midwives were registered in the county against 327 for the preceding year. Of these, 138 were certificated, against 105 for the previous year. The remaining number (206) were on the register by reason of their being in practice before the Act came in force. In order to prevent any hardship on midwives who failed to register under this last provision, an extension of the rule dealing with the matter, which came to an end in March, 1905, was granted from March 14th to September 30th, 1910. Unfortunately for many midwives, this rule was not made known to them, and so they were debarred from taking advantage of it.

The inspection of the midwives was carried out, as in previous years, by the district medical officers of health, who paid four visits to each midwife in the urban and two in the rural areas. The fees for this purpose amounted to £354 11s., against £347 4s. 9d. for the preceding year.

Since Section 1 (2) of the Act came in force on April 1st, no complaint except at Teignmouth, has been received, of a shortage of midwives in any district. This is probably due to the old order still going on, and will not be altered unless the inspectors notify cases of a breach of the law. Many of these must be in existence, although only two cases were reported and investigated during the year. In neither case was it possible to get sufficient evidence to advise a prosecution. The medical officers of health have been asked to report to the County Medical Officer any such cases.

For the twelve months ending June 30th, 1910, the following particulars were gathered from the forms, which the district medical officers of health are required to fill up and forward to the County Medical Officer of Health twice a year.

Midwives were present at the birth of 4,064 of the 9,097 children born in the Administrative County. Of these, 56

were still-births. Medical aid was requisitioned in 496 cases, and 17 deaths were reported in the practice of the midwives.

Of the midwives inspected, 29 could not use an enema syringe, 262 were unable to use a catheter, 161 could not use a thermometer, 24 did not wear washable dresses, 8 used no disinfectants, 38 kept no register and 47 had no bags of appliances. During the last six months of the year, there is an improvement in regard to the four latter conditions, especially in regard to the wearing of non-washable dresses, viz., 8 cases against 16 for the preceding six months, and 3 cases of women not using disinfectants against 5 for the previous six months. There can be no excuse for the non-compliances with the rules of the Central Midwives Board in these matters; but in regard to the inability of the large number of midwives to use an enema syringe, pass a catheter and take the patient's temperature, the condition of affairs will only disappear as the old illiterate "gamps" are replaced by the trained certificated midwives.

It is gratifying to state that only 7 cases of puerperal fever, against 16 for the preceding year, and 15 for the year 1908 were reported—the deaths numbering 5 against 8 for the previous year. For the urban districts one was notified from Bideford, one from Exmouth with a fatal result, and one from East Stonehouse with a fatal result, due to the neglect of the midwife in attendance. For the rural districts, one case was reported from Crediton (Morchard Bishop) and one fatal case in each of the districts of Newton Abbot (Lustleigh), Plympton St. Mary (Shaugh), and Totnes. No blame was attached to the midwives in attendance on the latter cases.

## **BACTERIOLOGY.**

The decision of the Council, in June, 1909, to grant free bacteriology for diphtheria, typhoid fever, and tuberculosis, to all district medical officers of health for their use in the discharge of their duties, has been more than justified by the results; and the further extension of bacteriology to all medical men practising in the county for their poorer patients, in connection with the Diphtheria Antitoxin Order, 1910, must have the best of results in preventing the death roll from

diphtheria, for no excuse can now be forthcoming as to the diagnosis of the disease, and for the prompt use of antitoxin serum, both as a curative and preventive remedy. As for last year, so the present year's reports contain expressions of gratitude from many of the medical officers of health for the help afforded by this free bacteriology.

The following tables give the details of the specimens sent to the office of the County Medical Officer during the year.

## URBAN.

DISTRICTS.	DIPHTHERIA.		TYPHOID.		TUBERCULOSIS.		TOTALS.
	Positive.	Negative.	Positive.	Negative.	Positive.	Negative.	
Ashburton	..	..	..	..	..	..	..
Bampton	..	..	..	..	..	1	1
Barnstaple	..	8	..	2	2	..	34
Bideford	..	3	..	..	3	7	16
Brixham	..	..	..	..	..	..	..
Buckfastleigh	..	1	..	..	..	..	8
Budleigh Salterton	..	..	..	..	..	..	..
Crediton	..	..	..	..	..	..	..
Dartmouth	..	..	..	..	..	..	..
Dawlish	..	1	1	..	..	..	5
Exmouth	..	..	..	..	..	..	..
Heavitree	..	1	..	3	3	5	15
Holsworthy	..	..	..	..	..	..	..
Honiton	..	..	..	..	..	..	..
Ilfracombe	..	..	..	..	2	..	2
Ivybridge	..	..	..	..	..	..	..
Kingsbridge	..	..	1	..	..	2	5
Lynton	..	..	..	..	..	..	..
Newton Abbot	..	52	..	..	..	..	262
Northam	..	..	..	..	2	..	4
Okehampton	..	..	2	..	..	..	2
Ottery St. Mary	..	..	..	..	..	..	..
Paignton	..	..	..	..	..	..	..
Salcombe	..	..	..	..	..	..	..
Seaton	..	..	..	..	..	..	..
Sidmouth	..	..	..	..	..	..	..
South Molton	..	..	..	..	..	..	..
Stonehouse	..	..	..	..	..	1	1
Tavistock	..	..	..	..	..	..	..
Teignmouth	..	1	..	..	1	4	12
Tiverton	..	11	..	..	..	..	59
Torrington	..	..	..	..	..	..	1
Torquay	..	8	..	..	..	..	47
Totnes	..	..	..	..	..	..	..



## RURAL.

DISTRICTS.	DIPHTHERIA.		TYPHOID.		TUBERCULOSIS.		TOTALS.
	Positive.	Negative.	Positive.	Negative.	Positive.	Negative.	
Axminster ..	..	..	..	..	..	..	..
Barnstaple ..	..	..	..	..	1	1	2
Bideford ..	..	2	..	..	..	..	2
Broadwoodwidge ..	1	5	3	..	..	..	9
Crediton ..	..	3	..	1	..	..	4
Culmstock ..	2	..	..	..	..	7	9
Holsworthy ..	1	..	..	..	..	..	1
Honiton ..	..	..	..	..	..	..	..
Kingsbridge ..	..	4	..	..	..	1	5
Newton Abbot ..	31	170	1	..	1	..	203
Okehampton ..	..	..	..	..	..	..	..
Plympton St. Mary ..	12	36	..	1	2	..	51
South Molton ..	..	..	..	..	..	..	..
St. Thomas ..	9	17	2	18	..	..	46
Tavistock ..	..	..	..	..	..	..	..
Tiverton ..	..	3	..	..	..	..	3
Torrington ..	..	1	..	..	..	..	1
Totnes ..	1	3	..	..	..	..	4

## TOTAL NUMBER OF SPECIMENS, WITH RESULTS.

	DIPHTHERIA.		TYPHOID.		TUBERCULOSIS.		TOTALS.
	Positive	Negative	Positive	Negative	Positive	Negative	
URBAN -	86	346	4	5	13	20	474
RURAL -	57	244	6	20	4	9	340
TOTALS -	143	590	10	25	17	29	814

## ELEMENTARY SCHOOLS.

The Memorandum of the Local Government Board to district medical officers of health, dated November 1908, requires the medical officer of health to state in his annual report in relation to public elementary schools, the sanitary conditions of, including water supply, action taken in relation to the health of the scholars and for preventing the spread of infectious diseases. In the joint Memorandum of September, 1909, issued by the Local Government Board and Board of Education, the subject of closure of schools and the exclusion of individual scholars for infectious diseases by order of the local sanitary authority, or any two of its members, under the advice of the medical officer of health, is again brought forward, with emphasis, under article 5, that the medical officer of health, acting under the sanitary authority, is responsible for dealing with outbreaks of infectious diseases in schools. Too much stress cannot be laid on this procedure, and under the orders of the Local Government Board the medical officer of health is required to at once investigate outbreaks of dangerous infectious diseases, and give directions for dealing with the same. Notifiable diseases are sent to the medical officer of health by medical men in attendance, and recently, by order of the Education Authority, other infectious diseases occurring among school children are notified to the medical officer of health. As some infectious diseases, other than those coming under the Notification of Infectious Diseases Act, are now considered dangerous, it is to be hoped that medical officers of health will take advantage of the school as a centre for investigations.

*Urban districts.*—There is little in the reports from these districts, except that the sanitary conditions are satisfactory and the ventilation good.

*Rural districts.*—Dr. Bethune reports on the improved water supply and drainage, and the addition of a class-room and teacher's house at Littleham (Bideford). Dr. Webb reports, for the Kingsbridge district, that the sanitary condition of the Galmpton Church schools is very unsatisfactory.

Dr. Young, for Okehampton, reports that the flushing arrangements at Exbourne require improvement, a water supply is required at Bondleigh, and North Tawton school requires a water carriage drainage scheme and a new playground. Dr. Pollock, for Tiverton, reports that the water supply at Willand is still impure.

During the year, the following schools have been closed for the different infectious diseases :—

Closed by the Sanitary Authority.	Closed by the School Medical Officer.	Closed by the Managers. (In some cases with the approval of the District Medical Officer of Health)
<p><b>Diphtheria.</b></p> <p>Bickington. Buckfastleigh. Shaugh Prior, Lee Moor.</p> <p><b>Influenza.</b></p> <p><b>Measles.</b></p> <p>Newton Abbot, High-week, C. Kingsbridge, Infants', C. Plympton St. Maurice. Plympton, Ch., and Public Bampton, Infants', C. Ivybridge. Axminster, South. Axminster (Boys' and Girls', C.) Dalwood, C. Washfield. Northleigh, Ch.</p>	<p>West Buckland. Chittlehampton. Diptford. Axminster, Infants', C. Colyton, Infants', C. Southleigh, C. Newton Poppleford.</p>	<p>Chardstock Hennock, Chudleigh Knighton. Sandford, East Village. Slapton, C. Tavistock, Gulworthy. Winkleigh, Hollacombe. Wembworthy.</p> <p>Hemyock, C. Dunkeswell Abbey. Halberton, Ash Thomas. Salcombe. South Huish. Malborough, Ch. South Milton. North Huish. Loxbeare, Ch. Honiton. Buckerell. Rockbeare, Marsh Green</p>



Closed by the Sanitary Authority.	Closed by the School Medical Officer.	Closed by the Managers. (In some cases with the approval of the District Medical Officer of Health)
<b>Measles</b> — <i>continued</i> . Plymstock, Hooe, Infants'		Monkton. Kilminster, Ch. Membury, C. Axminster, R.C. Bishopsteignton, Ch. Shute, C.
<b>Mumps.</b> Hartland.	Bideford, Geneva.	Ilfracombe, SS. Philip & James. Combe Martin, Infants'.
<b>Scarlet Fever.</b> Plympton, Sparkwell. Okehampton, C.	Holcombe Burnell.	West Anstey. Moretonhampstead (Pound Street, and Greenhill, C.). Sowton. Churston Ferrers. Tipton St. John.
<b>Whooping Cough.</b> Burlescombe. Tetcott, C. Iddesleigh and Dowland. Spreyton.	Halwell and Moreleigh. Throwleigh, C. Zeal Monachorum, C. Colebrooke, C. Chittlehampton. Chittlehamholt. St. Giles-in-the-Wood. Lydford, Dartmoor Prison. Crediton, Landscore. Kenton.	Honiton. Tawstock, Harracott. Poltimore and Huxham. Georgeham, Ch. East Anstey. North Molton, Heasley Mill. Broadclyst, Budlake. Combe Raleigh, Ch. Washfield. Lapford, C. Whitchurch, C. South Molton, Infants'. South Molton, United. Bickleigh (Tiverton). Beaford. North Molton. Crediton, Shirley Corner. Uffculme, Infants'. Pyworthy. Langtree. Berealston, Sir J. Maynard's.

## **METHOD OF DEALING WITH INFECTIOUS DISEASES.**

The recognised methods of dealing with infectious diseases are in vogue in many of the districts, such as the isolation of the patient either at home or in an isolation hospital, the use of disinfectants, the distribution of literature, and the disinfection of the person and home after the case has terminated. The two most important matters, viz., isolation of the patient in the hospital and the proper disinfection of clothing by steam are not possible of execution in many districts, as the facilities for such are not in existence. The notification of infectious diseases occurring among children in elementary schools by school teachers, to the medical officers of health and the school medical officer, have been of immense value in checking the spread of disease. In August, 1910, the Local Government Board issued the Diphtheria Antitoxin (Outside London) Order, 1910, which facilitated the free use of antitoxin serum, both as a prophylactic and a curative agent among the poorer inhabitants of districts. Most of the local authorities have availed themselves of this Order, and given directions for the due carrying out of its provisions. If the spirit of this Order is carried out, there should be a great diminution in the incidence of the death-rate from diphtheria. The Public Health (Tuberculosis) Regulations, 1908, are being carried out in all the districts. This, with the new Regulation, 1911, dealing with cases of pulmonary tuberculosis occurring amongst in-patients or out-patients at hospitals, or other similar institutions, for the treatment of the sick, which are supported wholly or partially otherwise than by the contributions of the patients, and otherwise those from rates and taxes, will, in the opinion of many, be the means of getting the notification of 60 per cent. of the dangerous infectious cases of tuberculosis.

In the County Medical Officers of Health (Duties) Order, 1910, that officer is required to give in his annual report “ a “ section as to the isolation hospital accommodation available “ for each county district and as to the steps which should

“ be taken to remedy any deficiency which may exist.” In order to carry out these duties, the accommodation as gathered from the reports of the district medical officers of health and the personal inspection of the County Medical Officer, is as follows :—

Urban Districts.	Accommodation for Ordinary Infectious Diseases.	Accommodation for Smallpox Diseases.
Ashburton ..	Nil ..	Nil ..
Bampton ..	Nil ..	Nil ..
Barnstaple ..	Hospital (14 beds for three diseases) ..	Nil ..
Bideford ..	Hospital (9 beds for one disease) ..	Nil ..
Brixham ..	Nil ..	4 beds ..
Buckfastleigh ..	Nil ..	Nil ..
Budleigh Salterton ..	Use of Exeter Sanatorium ..	Nil ..
Crediton ..	Nil ..	Nil ..
Dartmouth ..	Nil ..	Nil ..
Dawlish ..	Use of Exeter Sanatorium ..	Nil ..
Exmouth ..	Use of Exeter Sanatorium ..	Nil ..
Heavitree ..	Isolation Hospital ..	Nil ..
Holsworthy ..	Nil ..	Nil ..
Honiton ..	Nil ..	Nil ..
Ilfracombe ..	Hospital ..	Hospital ..
Ivybridge ..	Nil ..	Nil ..
Kingsbridge ..	Nil ..	Nil ..
Lynton ..	Hospital ..	Nil ..
Newton Abbot ..	Joint Hospital (with Rural) ..	Nil ..
Northam ..	Nil ..	Nil ..
Okehampton ..	Nil ..	Nil ..
Ottery St. Mary ..	Nil ..	Nil ..
Paignton ..	Hospital ..	Nil ..
Salcombe ..	Nil ..	Nil ..
Seaton ..	Nil ..	Nil ..
Sidmouth ..	Use of Exeter Sanatorium ..	Nil ..
South Molton ..	Nil ..	Nil ..
Stonehouse ..	Use of Devonport Hospital (15 beds) ..	Nil ..
Tavistock ..	Nil ..	Nil ..
Teignmouth ..	Hospital (8 beds) ..	Nil ..
Tiverton ..	Joint Hospital (with Rural) ..	Nil ..
Torrington ..	Nil ..	Nil ..
Torquay ..	Hospital ..	Hospital ..
Totnes ..	Nil ..	Nil ..



Rural Districts.	Accommodation for Ordinary Infectious Diseases.			Accommodation for Smallpox.
Axminster	..	Nil	..	Nil
Barnstaple	..	Nil	..	Nil
Bideford	..	Nil	..	Nil
Broadwoodwidge	..	Nil	..	Nil
Crediton	..	Nil	..	Nil
Culmstock	..	Nil	..	Nil
Holsworthy	..	Nil	..	Nil
Honiton	..	Nil	..	Nil
Kingsbridge	..	Nil	..	Nil
Newton Abbot	..	Joint Hospital (with Urban)	..	Nil
Okehampton	..	Nil	..	Nil
Plympton St. Mary	..	Use of Plymouth Borough Hospital	..	Hospital
South Molton	..	Nil	..	Nil
St. Thomas	..	Use of Exeter Sanatorium	..	Nil
Tavistock	..	Nil	..	Nil
Tiverton	..	Joint Hospital (with Urban)	..	Nil
Torrington	..	Nil	..	Nil
Totnes	..	Nil	..	Nil

From the tables it will be seen that 19 of the 32 urban and 14 of the 18 rural districts are without hospital accommodation for ordinary infectious diseases; also that 3 of the urban and one of the rural districts have provision for small pox cases. Comments are made by most of the medical officers of health as to the want of accommodation, especially in regard to that for small pox, for all are agreed that, at no distant date, owing to the lax and inadequate administration of vaccination, the county will be faced with severe outbreaks of small pox with no provision for means of isolation. With regard to the accommodation for the other infectious diseases, in several parts of the county a combination of districts for isolation hospitals is most necessary. Especially does this apply to North and East Devon, with the exceptions of Ilfracombe and Tiverton; to South Devon, for Totnes (urban and rural), Salcombe, Kingsbridge (urban and rural); to West Devon—Tavistock (urban and rural), Broadwoodwidge, Holsworthy (urban and rural), and parts of Okehampton (urban and rural).

This subject should, at no distant date, receive attention,

especially in combination with the sanatoria treatment of consumption. Economy would accrue in the erection of a few hospitals covering large districts, with one administration block for all infectious diseases.

## **SYSTEMATIC INSPECTION.**

Little comment is made on this in any of the reports, although still required by the Order of the Local Government Board, March 23rd, 1891. Such inspections are defined as inspections taken independently of such inquiries as the medical officer of health may have to make in particular outbreaks of disease, or into unwholesome conditions, to which his attentions has been specially called by complaint or otherwise. Such inspections will include house-to-house inspection. This house-to-house inspection is now made under the provisions of the Housing and Town Planning Act, 1909, and is reported on under the heading of House Accommodation in this report, but apart from this, other systematic inspections are required, such as those dealing with water supplies, drainage, and duties under the Dairies, Cowsheds and Milkshops Orders.

## **PORT DISTRICTS.**

### **BARNSTAPLE.**

During the year, 142 vessels (132 sailing vessels, and 12 coaling steamers) against 147 for the previous year, were inspected at this port. Twelve of the sailing vessels were from foreign ports. No cases of infectious diseases were discovered. A few minor sanitary defects were found on some of the sailing vessels and were at once remedied.

The hospital ship *Nymphen*, owing to the winter gales, shifted her position, but she is available for the reception of infectious diseases.

No action has been taken under the Public Health (Regulation as to Food) Act, 1909, as the importation of food stuffs in this port is limited.

## **DARTMOUTH AND TOTNES.**

During the year, 1,276 steam and sailing vessels, with a gross tonnage of 638,575, against 1,266 vessels with a tonnage of 549,445 for the previous year, entered this port. Of this number, 555 were inspected by the officials of the sanitary authority, 38 were found to have sickness on board, all of a minor character except 2—one a case of small pox in the convalescent stage. This case went on to King's Lynn in the ship, and the medical officer of health of that port was duly notified. The other was a case of typhoid, which was landed and treated in the cottage hospital, recovery taking place.

Seventy-five vessels came from foreign ports infected with cholera, but in no instance was any suspicious case discovered on board, when the passengers and crews were closely examined.

The majority of the larger vessels call only for bunker coal and do not discharge passengers or cargo, but nearly all the smaller vessels come from British ports to discharge merchandise.

The infectious diseases hospital ship *May Fly* is still in a serviceable condition, but was not used during the year.

## **EXETER.**

During the year, 188 vessels entered the port, against 125 for the previous year. Of these, 51 came from foreign ports. No infectious diseases were discovered on any of the vessels and only two sanitary defects were found.

Extra precautions have been taken in the way of providing for the immediate supply of the necessary furniture, caretaking, and nursing on board the fever hulk, should a case of cholera, yellow fever, or plague be brought to the port.

## **KINGSBRIDGE AND SALCOMBE.**

During the year, 423 vessels, against 480 for the previous year visited this port. The medical officer of health inspected 15 of the vessels and the sanitary inspector 22. In no case was an infectious disease or a sanitary defect found. No food stuffs are imported or exported, and therefore no arrangements are made by the sanitary authority, as to the Regulations under



the Foods Act, 1907. The food for the crews was in all cases satisfactory. The medical officer of health again draws the attention of the authority to the absence of hospital accommodation, disinfecting apparatus, conveyance for the sick from vessels, and a boat for the use of the inspector.

## **PLYMOUTH.**

During the year, 3,528 vessels, against 3,468 for the previous year, were inspected by the sanitary officials. Of these, 132 were personally inspected by the Medical Officer of Health. 184 vessels, carrying 42,752 crew and 49,397 passengers, against 169 vessels, carrying 35,283 crew and 37,439 passengers for the previous year, arrived from plague infested ports, reporting sickness or deaths as having occurred during the voyage or on arrival at this port. 54 deaths and 584 cases of sickness were investigated by the officials. Of these cases, 216 were of an infectious character. The Sanitary Inspector visited 3,396 vessels. Among these, 242 had sanitary defects and notices were served on the masters for abatement. Of these 3,396 vessels inspected, 2,987 were British, 128 German, 103 French, 52 Dutch, 44 American, 27 Norwegian, 17 Swedish, 16 Russian, 10 Danish, and the remaining 12 of various nationalities.

The quantity of unsound food voluntarily surrendered to the Port Inspector as unfit for food, consisted of 17 lbs. of cod fish and 22 lbs. of haddock, which were being issued as part of the crew's rations.

Of the 584 cases of sickness investigated during the year, 32 were cases of pulmonary tuberculosis and of the 52 deaths, 9 were due to this disease.

During the year, no cases of cholera arrived at the port, in spite of the fact that there had been a considerable extension of the disease in many of the ports in the Black and Mediterranean seas, working in a westerly direction at Port Said, Suez, Naples, Marseilles, and Canary Islands. All of these ports are in direct communication with Plymouth. Special precautions were taken in 8 vessels to prevent any chance of the inroad of the disease into this port by having the drinking water pumped overboard, tanks cleared, a fresh water supply placed on board, bilge water pumped out and bilges cleansed.

On account of the outbreak of plague in Suffolk, a special Memorandum was issued by the Local Government Board in February, dealing with the prevalence of infected rats. The precaution suggested had previously been carried out in this port. In December, a suspicious small black rat was discovered dead in the Great Western docks, but on bacteriological investigation no plague organism was found.

In December, the White Star ss. *Adriatic* arrived from New York with a case of scarlet fever and diphtheria on board; the former case proceeded in the ship, the latter case was removed to the Borough hospital and recovered.

The hospital ship *Pique*, which, on account of her leaky condition, has been replaced by the sloop *Flamingo*, acquired from the Admiralty.

The inspection of foods under the Public Health (Regulation as to Food) Act, 1907, has been actively carried out during the year. The quantity of food landed being considerably increased, especially in the matter of pig carcasses, on account of the scarcity and high price of English pork. 3,276 pigs were examined, of which 48 were rejected. Large quantities of veal were landed as well as cargoes of fresh fruit and a large consignment of chilled and frozen meat, brought by the Royal Mail Steam Packet Co.

Owing to the increase of work in the matter of new steamship lines making Plymouth a port of call, and the examination of foods and the increased duties required in connection with the prevention of cholera and plague, the Medical Officer of Health has advised the authority that it is necessary to have office accommodation in the Great Western docks. Steps to procure these are being taken.

## **TEIGNMOUTH.**

During the year, 702 vessels, against 725 for the preceding year, arrived at this port. Fifty-nine came from foreign ports. 280 vessels were inspected by the officials, but only in 27 was it necessary to issue notices for sanitary defects. The Medical Officer visited and examined the crews (directly on their arrival) in all vessels coming from cholera infected Russian ports.

No cases of notifiable diseases were reported. The Bitton Isolation Hospital and steam disinfectors meet the needs of the port. The Medical Officer of Health again reports on the absence of a mooring station, with the difficulties that might arrive in consequence, should a ship have to be declared "infected."

## METEOROLOGY.

The following table, taken from the quarterly reports of the Registrar General, give the particulars of the weather in the county for the year :—

Districts.	Rain Days.	Rainfall, in inches.	Mean Temperature.	Bright Sun- shine, in hours
<i>1st Quarter.</i>				
North Devon (Woolacombe)	60	7.6	44.5°	320
South Devon (Plymouth)	55	9.9	44.6°	327
S.W. England..	58	10.8	42.4°	320
<i>2nd Quarter.</i>				
North Devon (Woolacombe)	51	7.0	52.3°	565
South Devon (Plymouth)	46	6.9	52.8°	597
S.W. England..	53	8.6	51.6°	550
<i>3rd Quarter</i>				
North Devon (Woolacombe)	41	7.0	59.2°	511
South Devon (Plymouth)	42	9.7	58.9°	512
S.W. England..	39	8.3	57.4°	480
<i>4th Quarter.</i>				
North Devon (Woolacombe)	65	14.9	52.2°	201
South Devon (Plymouth)	69	17.7	48.6°	216
S.W. England..	68	17.8	46.3°	190
<b>TOTALS.</b>				
North Devon (Woolacombe)	217	36.5	52.3°	1597
South Devon (Plymouth)	212	44.2	51.2°	1652
S.W. England..	218	45.5	49.6°	1540



JANUARY.—Weather was very mild for the first three weeks, Plymouth having a minimum of  $50^{\circ}$  in the nights of the 8th and 9th. Thunderstorms were prevalent over the south at the end of the month.

FEBRUARY.—Sunshine was above the average being more than 20 hours in some cases, Torquay having 117 hours.

MARCH.—There was, on the 9th, a heavy gale at 63 miles an hour. There was an excess of sunshine, Paignton with 197, having the largest.

JUNE and JULY.—The frequency of fog along the coast was a noticeable feature during these months, interfering with shipping movements.

SEPTEMBER.—This month was one of the driest on record. Nearly the whole of England and Wales had less than one inch of rain.

OCTOBER.—The dry weather of the previous month continued until the middle of this month, when heavy rains occurred in many localities, 1.7 inches of rain falling in one day at Barnstaple (on the 11th). Mildness was a feature of the month, and the sea water was  $3^{\circ}$  to  $4^{\circ}$  warmer than the air.

DECEMBER.—The rainfall was excessive, 14.1 inches being registered at Sheepstor during the month. Many rivers considerably overflowed their banks.

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**TABLE VI.**



**TABLE VI.**  
**1910.**  
(LOCAL GOVERNMENT BOARD TABLES I. AND IV.)

[illegible]

**TABLE IX.**

**INFANT MORTALITY.**

**TABLE IX.**  
**1910.**  
**INFANT MORTALITY. (LOCAL GOVERNMENT BOARD TABLE V.)**

[illegible]



**TABLE XVI.**

**SUMMARY OF  
SANITARY INSPECTORS' REPORTS.**

TABLE XVI.  
1910.  
SUMMARY OF SANITARY INSPECTORS' REPORTS.

[illegible]

\* This return covers the period from October 1st. The LATE Sanitary Inspector left no records of work carried out from



s of work carried out from January 1st to September 30th.

OFFENSIVE TRADES.			PRIVIES AND ASPHITS.		RAILWAY STATIONS.		RIVERS AND STREAMS.		SCAVENGING.		SCHOOLS.		SLAUGHTER-HOUSES.		WATER CLOSETS.					WATER SUPPLY.																		
Number	No. improperly conducted.	What By-laws are in force ?	No. of Complaints of insufficient privy accommodation.	No. of new privies and asphits built.	No. of Dustbins provided for old houses.	Have you regularly inspected the sanitary arrangements of the railway stations in your district ?	Condition satisfactory or not ?	No. of Visits.	Does anything pollute the rivers or streams in your district ?	If so, what, and where ?	How often is house refuse removed ?	By Authority, or under Contract ?	How many tons of manure and refuse removed ?	No. inspected.	No. found in an unsanitary condition.	Number.	No. found defective.	No. of Visits.	Are Statutory Notices affixed ?	No. of Public Closets and Urinals built.	No. repaired.	Any more wanted ?	No. of Private Closets built for old Houses.	No. repaired.	No. of Earth Closets built for old Houses.	No. of Privies converted into Earth Closets.	No. of Privies converted into Water Closets.	No. of Samples taken for analysis.	No. of Samples found polluted.	No. of new Houses certified for occupation with adequate water supply	No. of Certificates refused.	No. of Houses or Villages supplied by suspicious Wells.	No. of old Wells cleaned out and repaired.	No. of new Wells sunk.	Who are the owners of the Water Works ?	Are there any complaints against the water supplied as to quantity or quality ?		
6		P.H.A.	1		yes	yes	20				Alternate days	Contract	370	3		5		50	no					1				3			1		U.D.C.	no				
		M.B.L.			yes	yes	15				Twice weekly	Seavengers	3	3		4		13	no				2				2						U.D.C.	yes				
					yes	yes					Once and twice a week	Authority	3000	all	2	7	1	212	yes		3	yes	31	43		3	2	2		33		1		Barnstaple Water Co	yes			
					yes	yes					Some parts daily	Authority	2600	6		7	1	52		3	1	yes	10											U.D.C.	yes			
					yes	yes					Daily	Contract	900	5		4		56	yes	1	1		18	96				1	1	14		1		U.D.C.	no			
					yes	yes	10	no			Three times a week	Contract		3		4		25				2												U.D.C.	no			
					yes	yes	11	no			Twice weekly	Contract	750	1		2		6	yes	1			1	3										U.D.C.	no			
					yes	yes	12	yes	Drainage, Fordton Cotts.		Weekly	Contract		2		7	2	28	no	1		no	4	11				4		8					U.D.C.	no		
					yes	yes	14	no																											U.D.C.	no		
					yes	yes					Daily and twice weekly	Authority	2356	3		6		18	no			1		3											U.D.C.	no		
					yes	yes					Weekly	Authority	4485148	8	1	6	1	180	no	2				104												U.D.C.	no	
					yes	yes	55	yes	Sewage at all outfalls		Once and twice weekly	Contract	3000	7		6		156	yes	1															E.C.C.	no		
					yes	yes					Weekly	Authority		3		4		96	no			yes	6	2			2		3			1	2	U.D.C.	yes			
					yes	yes					Twice weekly	Contract		4		12		144	no																U.D.C.	no		
					yes	yes	12	yes	Paper mills and Tan yard		Twice weekly	Contract	4228	5		8	7	313	yes	4		yes		8	1	1		27	1						U.D.C.	no		
					yes	yes	40	yes			Weekly	Contract	250	3		3		30	yes			yes	5	7			3		4						U.D.C.	no		
					yes	yes	6	no			Three times a week	Contract	150	4		3		12			1	no	4	3	2		2									U.D.C.	no	
					yes	yes	10	no			Daily	Contract	5471	3		1	1	10	no					15												U.D.C.	no	
					no	yes	20	yes	Westward Ho!		Twice and three times weekly	Contract		8		3	1	58			1	no		68				4	2	29			1		U.D.C.	no		
					yes	yes			Sewage		Three times weekly	Auth'ity & Contract	2028	5	2	3		16	no	1		yes					5	8	5	12	2				U.D.C.	no		
					yes	yes	8				Twice and three times weekly	Authority										yes													U.D.C.	yes		
					yes	yes	10	no			Twice weekly	Contract	200	4		5	1	7	no			1	2	8		7		1								U.D.C.	no	
					yes	yes	30				Once, twice and 3 times weekly	Authority	3053	5		5	2	65	no			yes	8	49			1	1	69			1				U.D.C.	no	
		M.B.L.			yes	yes	12	no			Three times weekly	Authority	900	1		2		12	no	1		no														Lord Clifton	no	
					yes	yes	5				Once, twice and 3 times weekly	Authority	1560	4	2	6	6					2	13	19			2		17							Sidmouth Water Co.	no	
		M.B.L.			yes	yes	26	no			Three times a week	Authority	600			8		96	yes	3		1	2													U.D.C.	no	
					yes	yes					Twice and three times weekly	Authority	6213	4	2	2	1	56	yes		1	no	13	94												U.D.C.	no	
					yes	yes	4	no			Twice and three times weekly	Direct labour	780	5		2		78	yes				10	22			6						1			Duke of Bedford	no	
					yes	yes	4	yes	Sewage from villages		Twice and three times weekly	Authority	3718	3		7		14	yes	5		yes	13	10						31						U.D.C.	no	
					yes	yes			Nothing of a serious nature		Twice weekly	Authority	1300			16			no			yes	6					19	6	12			1			U.D.C.	no	
					yes	yes	3				Twice weekly	Authority	270	3		6		8	no		2		4	15	6	5	2			6			1			U.D.C.	no	
		Local			yes	yes	2				Shops daily, otherwise weekly	Authority		13		8	5	528	yes	2	1	yes	86													U.D.C.	no	
					yes	yes		no			Four times a week	Authority		3	1	4					1	yes					2	2		6						U.D.C.	no	
1					yes	yes	17	yes	Sewage		Twice weekly	Auth'ity & Contract		6	2	14		36	no					4	1		6	1				2	1		R.D.C.	yes		
					yes	yes	90	yes			Twice weekly	Contract	1000	20		15	7	87	yes	1		yes				88	27	35	30	50		1			Authority, Ilfrac'be U.D.C. and Barnstaple Water Co.	no		
											Once and three times weekly			17		10		10							4		5	2	2			6	1			No Water Works in District	no	
1					yes	yes	5	no						20	2	14	1	23	no																			
					yes	yes										2	14	8	36	no				4	2	2	1	2	20	11	2			16	6			
					yes	yes	26		Drainage Culmst'k & Hemy'k					3		1	6		36	no																		
					yes	yes	3							8	3	4	1	18	no																			
1					yes	yes	6	yes	Sewage outfall, Modbury			Contract		6	2	14		23	no					10	25	6	57	7										
2		L.G.B.			yes	yes		yes	Sewerage, Chudleigh and Chudleigh Knighton		Twice and three times weekly	Authority				33	2	66				yes	53			6												
					yes	yes					Twice weekly			14		19	2	65							6	2												
1					yes	yes					Once and three times weekly	Contract		31	2	16	4	27	no	2		yes	60	19	2	5	1	9	2	33			9					
					yes	yes								26	1	13		60	no			no		9	1	9	3	1	17	6	5			4	6			
1					yes	yes	34		Effluents from sewers without injury		Twice weekly	Contract		13	4	43	3	65	yes				36	41	41	9		1		19			6	5				
					yes	yes			Mines and clay works					9	2	15	7		no		1			2	20	3	3	10	11	4	23			4	4			
					yes	yes			No serious pollution		Daily and weekly					25		100										38	13	25			9	8				
					yes	yes	10	no				Contract		22	11	9	6	19	no				6	27	6	23	4	25	7	9			7	4				
																6	1	12										7	2	10			1					



